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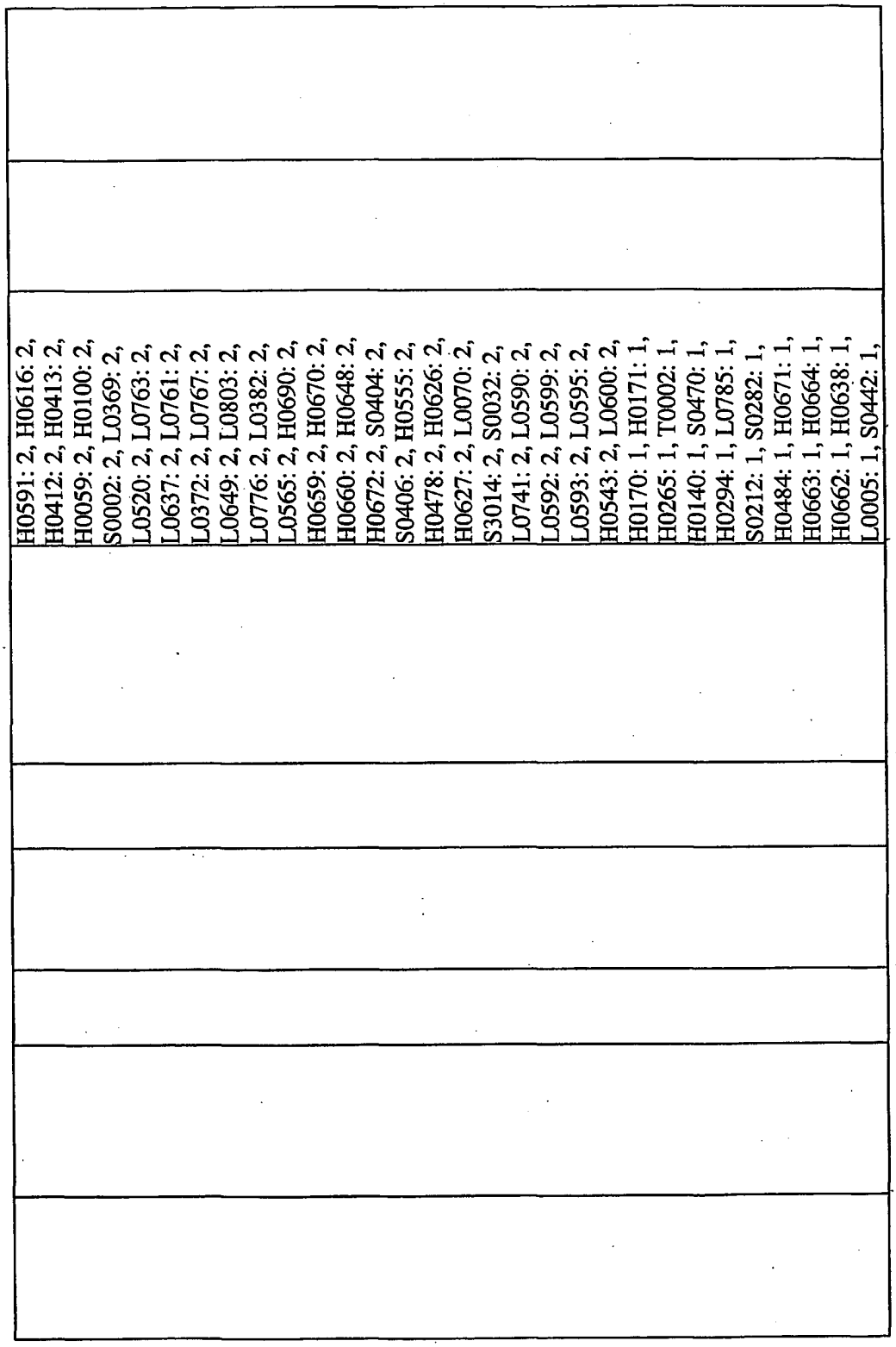
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HAOTF84	HAOTF84R	1022	68 - 208	3197	Lys-15 to Gln-22.	L0757: 13, L0731: 10, L0754: 7, L0770: 4, S0360: 3, H0553: 3, H0551: 3, L0769: 3, L0662: 3, L0659: 3,		

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			3 - 176				
		1023					
	HAOTF90R						
HAOTF90							

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HAOTG75	HAOTG75R	1024	2 - 328	3199	Glu-1 to Gln-8, Pro-31 to Trp-36.	L0747: 28, S0192: 21, L0659: 17, L0740: 12, L0757: 10, S0360: 9, H0545: 9, L0662: 9, L0775: 9, L0665: 9, L0439: 9, L0664: 8, S0358: 7, L0666: 7, L0750: 7, L0601: 7, L0777: 6, L0731: 6, L0471: 5, S0003: 5, H0038: 5, H0547: 5, S0206: 5, L0748: 5, L0756: 5, L0752: 5, L0758: 5, S0011: 5, S0026: 5, T0049: 4, L0717: 4, H0575: 4, H0012: 4, H0620: 4, H0083: 4, H0090: 4, L0770: 4, L0764: 4, L0794: 4, L0766: 4, L0804: 4, L0375: 4, L0806: 4, L0754: 4, L0779: 4, L0596: 4, L0588: 4, L0581: 4,	

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HAOTI07	HAOTI07R	1026	3 - 398	3201	Pro-1 to Arg-6, Met-12 to Ser-21.				
HAOTT79	HAOTT79R	1027	3 - 392	3202					
HAOTU79	HAOTU79R	1028	15 - 455	3203					
HAOTW22	HAOTW22R	1029	1 - 201	3204	Ser-35 to Ser-41, Ile-50 to Gly-55.				
HAOTW30	HAOTW30R	1030	376 - 564	3205	Arg-1 to Gly-7.				
HAOTW65	HAOTW65R	1031	113 - 475	3206		H0686: 2 and S0358: 1.			

HAPNK45	HAPNK45R	1032	68 - 232	3207				
HAPPR43	HAPPR43R	1033	200 - 313	3208	Lys-1 to Ser-6, Ala-26 to Thr-31.			
HAPQO14	HAPQO14R	1034	5 - 193	3209	Ser-1 to Pro-11.			
HAQML40	HAQML40R	1035	1 - 258	3210				
HASME85	HASME85R	1036	208 - 396	3211				
HAUAK54	HAUAK54R	1037	3 - 299	3212				
HAVMB46	HAVMB46R	1038	84 - 203	3213	Ser-13 to Arg-19, Ile-28 to Asn-33.			
HAVMW69	HAVMW69R	1039	3 - 116	3214		L0439: 2, L0755: 2, S0412: 2, H0170: 1, H0497: 1, H0591: 1, H0038: 1, L0641: 1, L0774: 1, L0651: 1, L0776: 1, L4501: 1, L0666: 1, L0663: 1, H0144: 1, L0438: 1, S0126: 1, H0659: 1, H0648: 1, L0602: 1, L0748: 1, L0749: 1, L0750: 1, L0756: 1, L0752: 1, L0759: 1, L0599: 1 and L0362: 1.		
HAVNQ92	HAVNQ92R A	1040	1 - 165	3215	Ala-19 to Arg-24.			
HAVOJ11	HAVOJ11R	1041	108 - 239	3216	Gly-1 to Thr-12, Glu-23 to Lys-38.			
HAZAC68	HAZAC68R	1042	3 - 587	3217	Ser-119 to Lys-124.			
HAZAD13	HAZAD13R	1043	2 - 517	3218	Lys-32 to Arg-40,			

					Ser-54 to Gly-59, Glu-133 to Ala-147, Gln-153 to Gln-164.			
HAZAD40	HAZAD40R	1044	191 - 445	3219	Val-9 to Gly-24.	S0360: 1, H0486: 1, L0761: 1, L0803: 1, L0774: 1, L0666: 1, L0663: 1, L0665: 1, H0520: 1, H0690: 1, H0435: 1 and L0747: 1.		
HAZAE44	HAZAE44R	1045	3 - 512	3220				
HAZAG23	HAZAG23R	1046	2 - 466	3221	Gln-12 to Thr-20, Cys-39 to Asn-45, Thr-60 to Gly-66, Lys-99 to Asp-106, Asp-119 to Pro-127.	H0424: 16, S0380: 13, L0748: 13, L0750: 12, S0440: 10, S0444: 9, L0755: 9, L0758: 9, S0192: 9, H0484: 8, S0358: 8, H0545: 8, L0809: 8, L0747: 8, L0749: 8, S0360: 7, S0410: 7, S0406: 7, L0752: 7, L0766: 6, S0374: 6, L0751: 6, L0754: 6, H0423: 6, S0442: 5, H0672: 5, S0378: 5, S0404: 5, L0759: 5, H0556: 4, S0356: 4, S0376: 4, H0546: 4, H0150: 4, S0438: 4, L0775: 4, L0776: 4, L0518: 4, S0328: 4, L0740: 4,		

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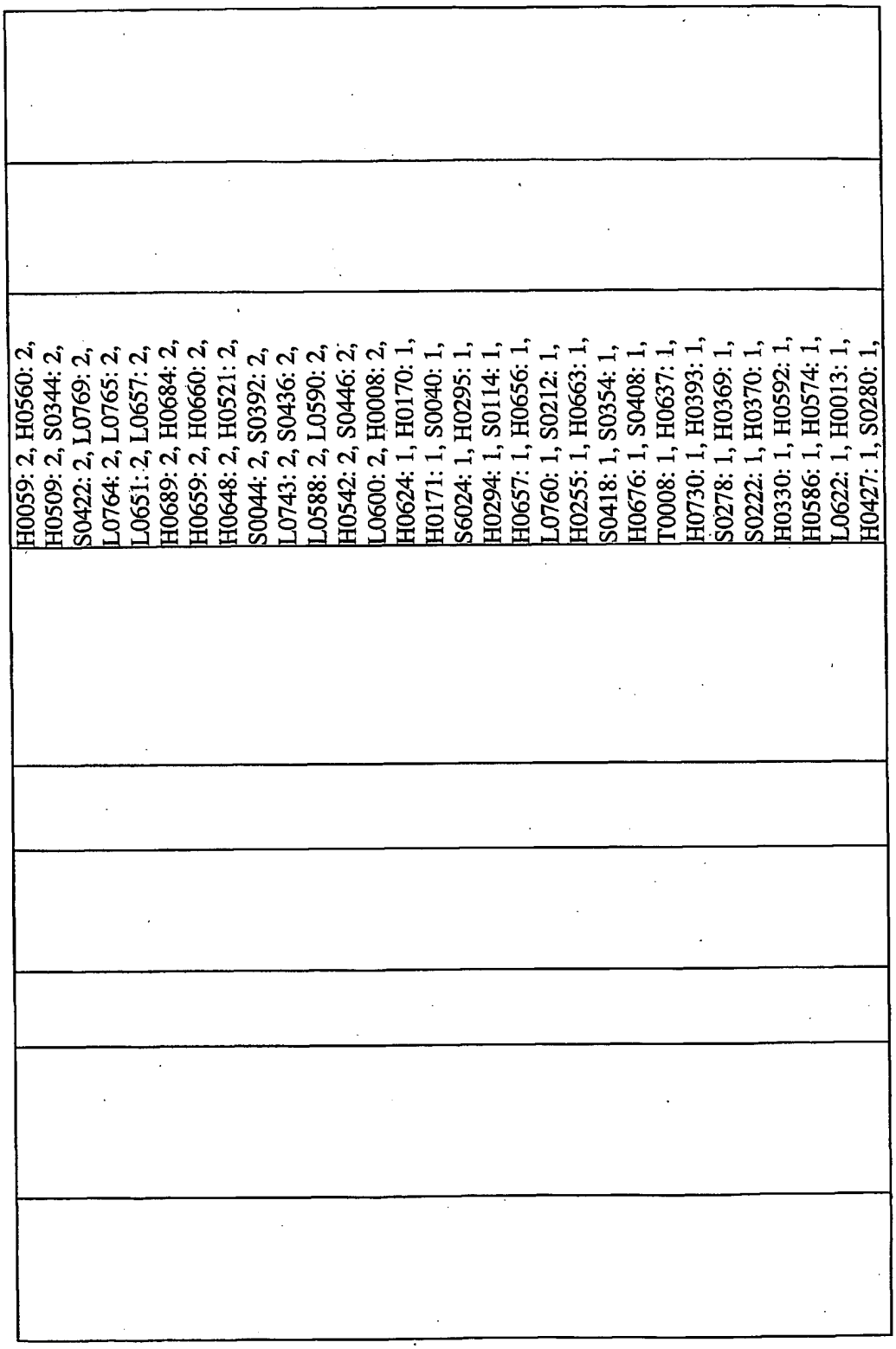
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HAZAG92	HAZAG92R	1047	282 - 467	3222	Pro-48 to Gly-59.				
HAZAH79	HAZAH79R	1048	138 - 515	3223	Gly-2 to Ser-9, Pro-46 to Cys-60, Pro-62 to His-69, Pro-81 to Thr-91, Ala-96 to Ser-101.				
HAZAI23	HAZAI23R	1049	1 - 165	3224	Lys-11 to Ser-16, Arg-20 to Glu-28.			L0747: 21, L0748: 18, L0750: 15, S0408: 11, L0771: 10, L0775: 9,	

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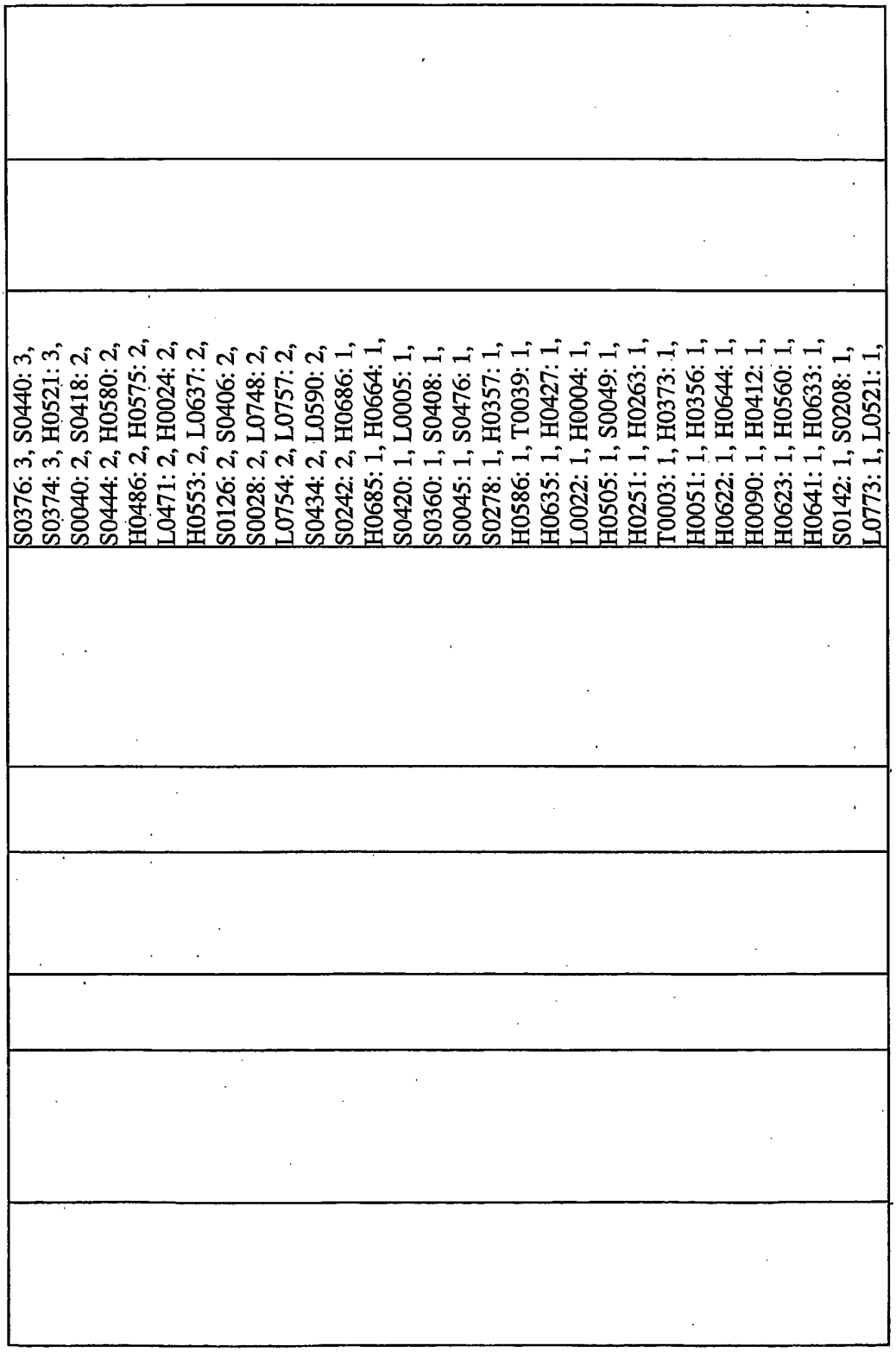
HAZAI87	HAZAI87R	1050	264 - 428	3225	Phe-34 to Lys-41.		L0659: 6, L0662: 5, S0212: 4, S0003: 4, H0551: 4, S0192: 4,	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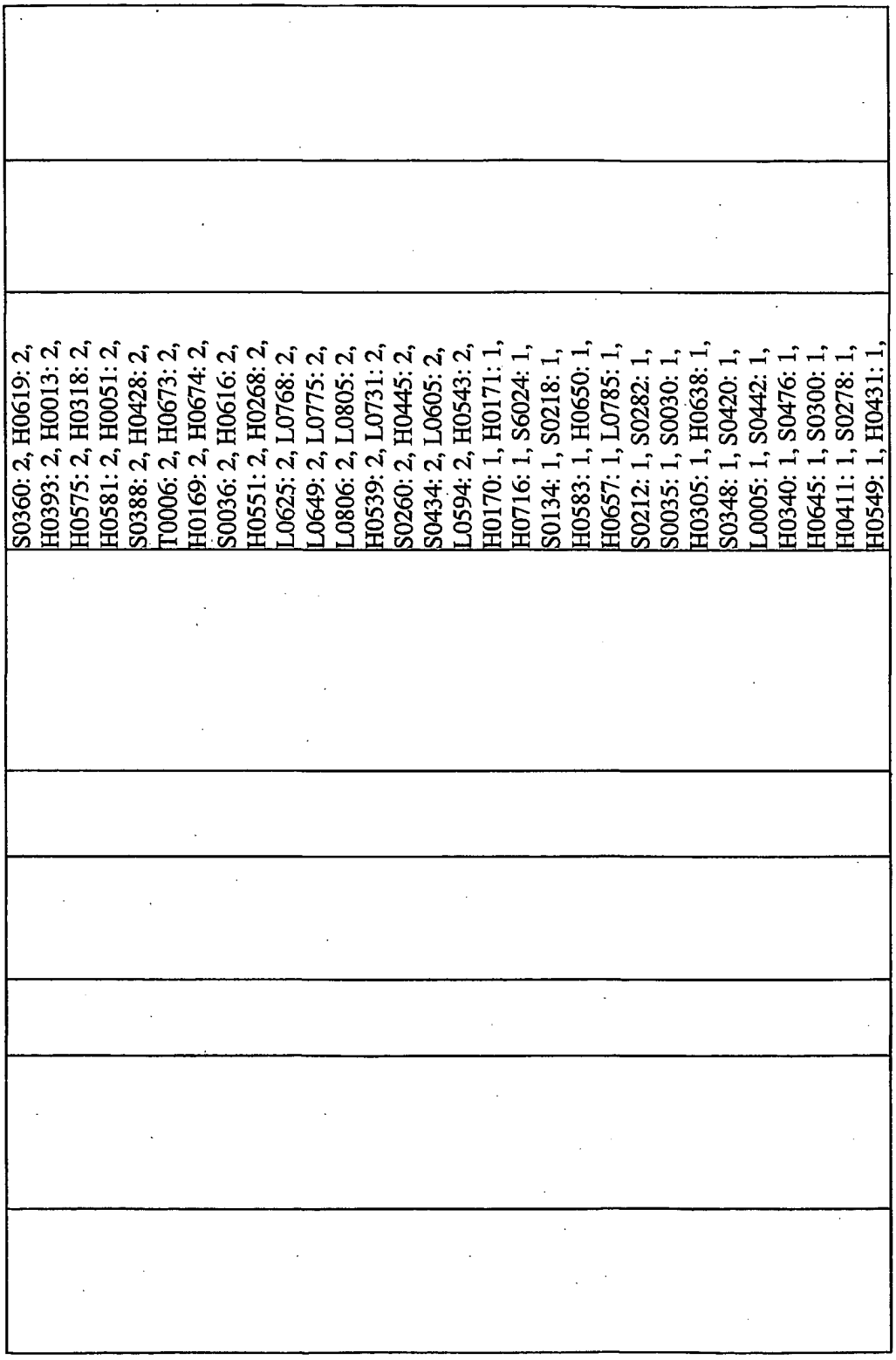
				3226	Ser-54 to Ser-60, Ile-69 to Gly-74.		
				3227	Ala-17 to Asp-36, Thr-56 to Met-61.	S0420: 2, H0575: 2, S0418: 1, L0005: 1, S0356: 1, H0619: 1, H0097: 1, H0581: 1, H0012: 1, H0373: 1, H0266: 1, S0250: 1, T0042: 1, H0625: 1, H0561: 1, S0438: 1, S0150: 1, H0641: 1, S0210: 1, H0693: 1, H0519: 1, H0690: 1, L0748: 1 and H0653: 1.		
HAZAI89	HAZAI89R	1051	3 - 260				
HAZAJ72	HAZAJ72R	1052	1 - 612				

HAZAQ80	HAZAQ80R	1053	27 - 389	3228	Thr-41 to Lys-46, Thr-53 to Gly-59, Ala-77 to Asp-84.			
HAZAW22	HAZAW22R	1054	2 - 172	3229	Ser-1 to Leu-14, Glu-39 to Thr-47.	L0748: 31, L0747: 18, L0752: 17, L0758: 17, L0777: 15, L0766: 13, H0014: 9, L0776: 9, L0751: 9, L0740: 7, L0779: 7, L0754: 6, H0040: 5, L0769: 5, S0330: 5, L0439: 5, L0756: 5, L0599: 5, S0356: 4, H0587: 4, H0622: 4, L0783: 4, L0744: 4, L0745: 4, L0749: 4, L0755: 4, S0031: 4, H0624: 3, S0222: 3, H0156: 3, S0010: 3, S0049: 3, S0051: 3, S0003: 3, H0591: 3, H0038: 3, L0763: 3, L0770: 3, L0662: 3, L0551: 3, L0803: 3, L0664: 3, H0144: 3, H0547: 3, H0521: 3, L0757: 3, L0759: 3, L0596: 3, L0608: 3, L0595: 3, S0114: 2, S0116: 2, H0341: 2, S0418: 2,		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			225 - 359			
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HAZBI39	HAZBI39R	1056	56 - 424	3231	Ser-29 to Ile-39, Gly-42 to Trp-48, Lys-82 to Val-92.	L0758: 3, H0068: 2, L0749: 2, L0756: 2, L0731: 2, S0026: 2, H0136: 2, S0040: 1, L0005: 1, H0351: 1, H0318: 1, H0052: 1, H0530: 1, H0266: 1, S0003: 1, H0412: 1, T0004: 1, T0042: 1, S0422: 1, H0529: 1, H0517: 1, L0762: 1, L0763: 1, L0770: 1,	

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HAZBJ69	HAZBJ69R	1057	3 - 323	3232	Gly-1 to Pro-6, Lys-58 to Asn-71.			
HBAGS73	HBAGS73R	1058	207 - 371	3233	Pro-15 to Thr-22, Lys-28 to Arg-35.			
HBBBE13	HBBBE13R	1059	2 - 199	3234				
HBCPI58	HBCPI58RA	1060	3 - 245	3235				
HBJAC26	HBJAC26R	1061	267 - 446	3236			L0665: 3, H0318: 2, L0659: 2, S0330: 2, L0439: 2, L0599: 2, H0583: 1, H0038: 1, L0761: 1, L0771: 1, L0387: 1, L0655: 1, L0666: 1, L0779: 1, L0777: 1, L0758: 1 and L0608: 1.	
HBJFS85	HBJFS85R	1062	94 - 261	3237	Asn-30 to Ile-35.			
HBJHY72	HBJHY72RP00B	1063	1 - 297	3238	Gly-1 to Pro-38, Leu-45 to Gly-64.		AR052: 12, AR055: 8, AR053: 8, AR033: 6, AR089: 6, AR061: 6, AR060: 5, AR096: 3,	

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HBJMN13	HBJMN13R	1064	145 - 231	3239	Glu-8 to Asn-13, Arg-16 to Thr-29.	L0731: 1, S0260: 1, L0596: 1, S0192: 1 and S0424: 1.			
HBXCG52	HBXCG52R	1065	59 - 547	3240	Lys-23 to Lys-32, Ser-72 to Leu-80, Ser-90 to Gly-95, Leu-98 to His-103, Ser-106 to Gly-113, Ile-121 to Phe-128.	S0280: 1 and S0038: 1.			
HBXFO08	HBXFO08R	1066	1 - 126	3241	Leu-2 to Val-10.				
HCACS53	HCACS53RP00A	1067	145 - 543	3242	His-2 to Glu-28, Ala-37 to Gly-45, His-54 to Pro-62, Glu-69 to Thr-77.				
HCHAJ85	HCHAJ85R	1068	171 - 359	3243	Arg-1 to Arg-6, Phe-27 to Arg-32.				
HCHMM71	HCHMM71R	1069	2 - 322	3244		H0651: 9, L0601: 5, H0559: 4, H0494: 4, L0646: 3, H0484: 2, H0255: 2, S0358: 2, H0550: 2, H0309: 2, H0014: 2, H0188: 2, H0617: 2, H0646: 2, L0769: 2, L0644: 2, L0806: 2, H0689: 2, L0750: 2, L0603: 2, H0624: 1, H0171: 1, H0657: 1, H0663: 1,			

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HCHMW20	HCHMW20R	1070	53 - 319	3245	Ser-1 to Thr-8, Glu-17 to Ala-32, Arg-39 to Trp-47.			
HCLBH21	HCLBH21R	1071	3 - 134	3246				
HCNDT49	HCNDT49R	1072	234 - 443	3247	Gln-17 to Pro-27.		L0439: 8, H0052: 7, L0748: 7, S0440: 5, L0758: 5, H0046: 4, H0038: 4, L0769: 4, S0442: 3, H0013: 3, H0253: 3, T0010: 3, L0774: 3, L0776: 3, H0144: 3, H0521: 3, S0404: 3, L0752: 3, L0731: 3, H0656: 2, S0358: 2, S0360: 2, S0222: 2, H0618: 2, H0620: 2, L0351: 2,	

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HCOMA72	HCOMA72R	1073	25 - 273	3248	Arg-1 to Leu-10, Ser-32 to Ala-45, Ala-58 to Gly-68.		
HCOMB04	HCOMB04R	1074	32 - 754	3249	Tyr-3 to Gly-10, Glu-19 to Trp-25.	L0747: 15, L0750: 7, L0731: 7, L0588: 6, L0748: 5, L0439: 5, L0759: 5, H0150: 3, S0144: 3, L0666: 3, L0665: 3, L0752: 3, L0758: 3, L0591: 3, S6024: 2, T0049: 2, S0356: 2, H0674: 2, H0413: 2, S0142: 2,		

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HCOMD38	HCOMD38R	1075	3 - 275	3250	Pro-1 to Pro-9, Ile-43 to Lys-48.	L0788: 1, L0664: 1, L0565: 1, L0438: 1, H0547: 1, S0126: 1, H0435: 1, H0659: 1, H0658: 1, H0670: 1, H0522: 1, H0696: 1, L0740: 1, L0751: 1, L0745: 1, L0755: 1, L0757: 1, H0445: 1, H0343: 1, H0595: 1, L0596: 1, L0581: 1, L0599: 1 and S0192: 1.		
HCOMD61	HCOMD61R	1076	1 - 315	3251				
HCOMF10	HCOMF10R	1077	350 - 622	3252	Asn-10 to Val-16.	L0740: 6, L0666: 2, H0547: 2, L0751: 2, L0777: 2, H0483: 1, S0358: 1, S0444: 1, H0038: 1, L0770: 1, L0768: 1, L0774: 1, L0805: 1, L0658: 1, L0789: 1, H0520: 1, H0659: 1, H0670: 1, L0747: 1, L0779: 1 and L0758: 1.		
HCOMF52	HCOMF52R	1078	2 - 523	3253	Lys-11 to Thr-16, Arg-18 to Glu-24, Arg-31 to Leu-38, Phe-51 to Glu-56,	L0439: 7, L0748: 5, H0255: 4, H0253: 4, H0012: 3, H0620: 3, H0617: 3, L0783: 3,		

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					Glu-59 to Glu-67, Thr-102 to Thr-114, Leu-119 to Gln-124.	

HCOMG28	HCOMG28R	1079	46 - 357	3254	Lys-1 to Arg-8, Asp-20 to Thr-26, Gly-35 to Glu-48, Leu-66 to Arg-72, Phe-83 to Tyr-88.	L0366: 1 and S0276: 1.		
HCOMG40	HCOMG40R	1080	29 - 373	3255	Trp-13 to Asp-19, Cys-29 to Gln-34, Ala-41 to Arg-52, Gly-54 to Gln-59, Arg-69 to Tyr-83.			
HCOMG82	HCOMG82R	1081	233 - 436	3256				
HCOMH70	HCOMH70R	1082	21 - 167	3257	Pro-13 to Pro-22.	H0670: 14, S0360: 9, L0657: 5, L0659: 4, L0809: 4, H0696: 4, L0777: 4, S0356: 3, L0764: 3, L0662: 3, S0374: 3, H0637: 2, H0411: 2, H0486: 2, L0762: 2, L0763: 2, L0521: 2, L0768: 2, L0774: 2, L0805: 2, L0666: 2, L0665: 2, H0659: 2, H0672: 2, H0710: 2, S0406: 2, L0744: 2, L0748: 2, H0686: 1, S0040: 1, H0713: 1, H0657: 1, H0662: 1, S0444: 1, S0408: 1, S0410: 1,		

HCOMI30	HCOMI30R	1083	42 - 497	3258		H0602: 1, H0643: 1, T0048: 1, H0263: 1, H0596: 1, H0014: 1, H0015: 1, H0594: 1, H0271: 1, H0687: 1, S0003: 1, S0214: 1, H0169: 1, H0674: 1, S0450: 1, H0649: 1, L0640: 1, L0646: 1, L0641: 1, L0773: 1, L0648: 1, L0388: 1, L0784: 1, L0806: 1, L0776: 1, L0655: 1, L0519: 1, L0530: 1, H0547: 1, H0689: 1, H0435: 1, H0648: 1, S0328: 1, S0330: 1, H0555: 1, H0627: 1, S0390: 1, S0028: 1, L0751: 1, L0779: 1, L0731: 1, S0434: 1, L0581: 1, L0362: 1 and H0667: 1.			
HCOMI37	HCOMI37R	1084	244 - 618	3259					
HCOML11	HCOML11R	1085	255 - 605	3260	Lys-1 to Gly-10, Pro-13 to Asn-23.				
HCOMM12	HCOMM12R	1086	138 - 338	3261		L0743: 19, L0731: 13, L0744: 12, L0748: 11, L0666: 9, L0751: 9,			

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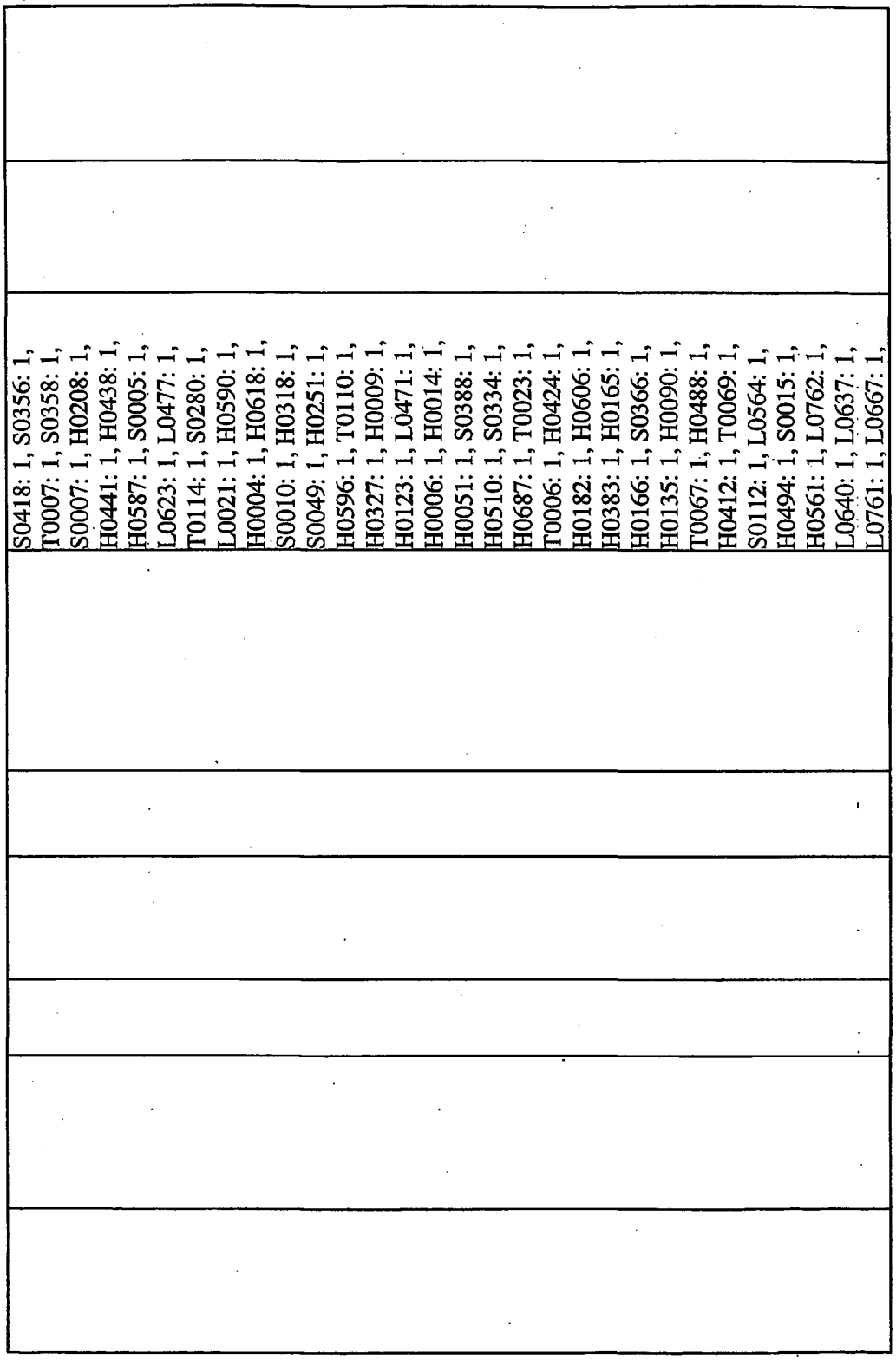
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HCOMM55	HCOMM55R	1087	298 - 119	3262	Pro-10 to Leu-20, His-27 to Lys-40.			
HCOMO58	HCOMO58R	1088	1 - 336	3263	Phe-7 to Asp-29, Glu-31 to Lys-38, Thr-46 to Thr-52, Glu-65 to Arg-72.			
HCOMW52	HCOMW52R P00B	1089	3 - 443	3264				
HCOMX77	HCOMX77R	1090	166 - 492	3265				
HCONC18	HCONC18RP 00B	1091	3 - 161	3266				
HCONH28	HCONH28R	1092	76 - 267	3267		L0754: 3, H0624: 2, S0354: 2, H0124: 2, L0766: 2, L0751: 2, L0759: 2, S0116: 1, H0661: 1, H0098: 1, H0597: 1, L0157: 1, S0250: 1, S0003: 1, H0622: 1, H0553: 1, H0509: 1, L0521: 1, L0662: 1, L0768: 1, L0803: 1, L0657: 1, L0659: 1, L0666: 1, L0663: 1, H0144: 1, S0126: 1, H0670: 1, L0779: 1, L0777: 1, L0755: 1, L0589: 1 and L0362: 1.		
HCONK56	HCONK56R	1093	8 - 718	3268				
HCONK75	HCONK75R	1094	33 - 398	3269				

HCONL49	HCONL49R	1095	3 - 221	3270	His-23 to Lys-34, Arg-49 to Leu-57, Pro-59 to Ser-66.			
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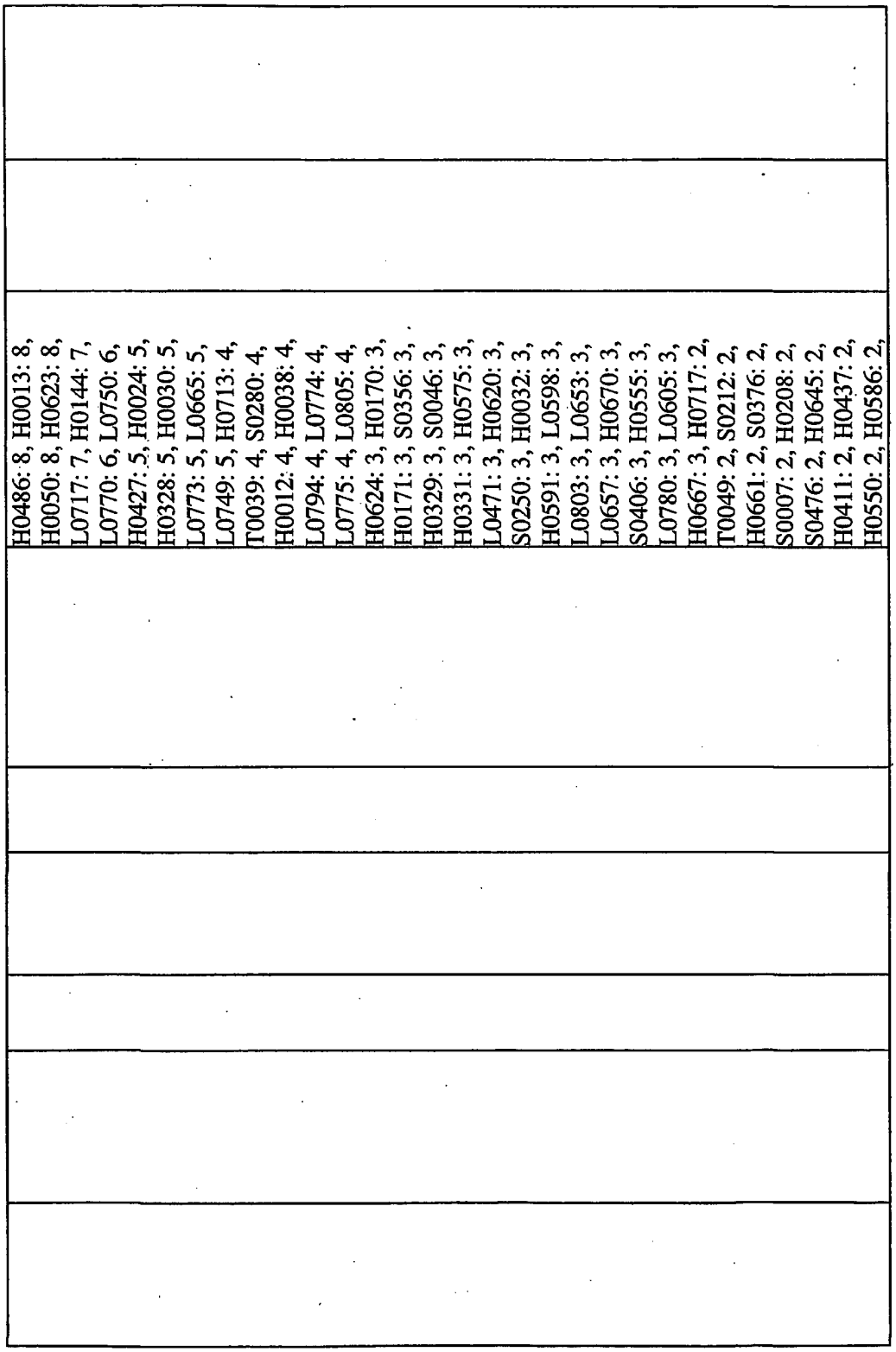
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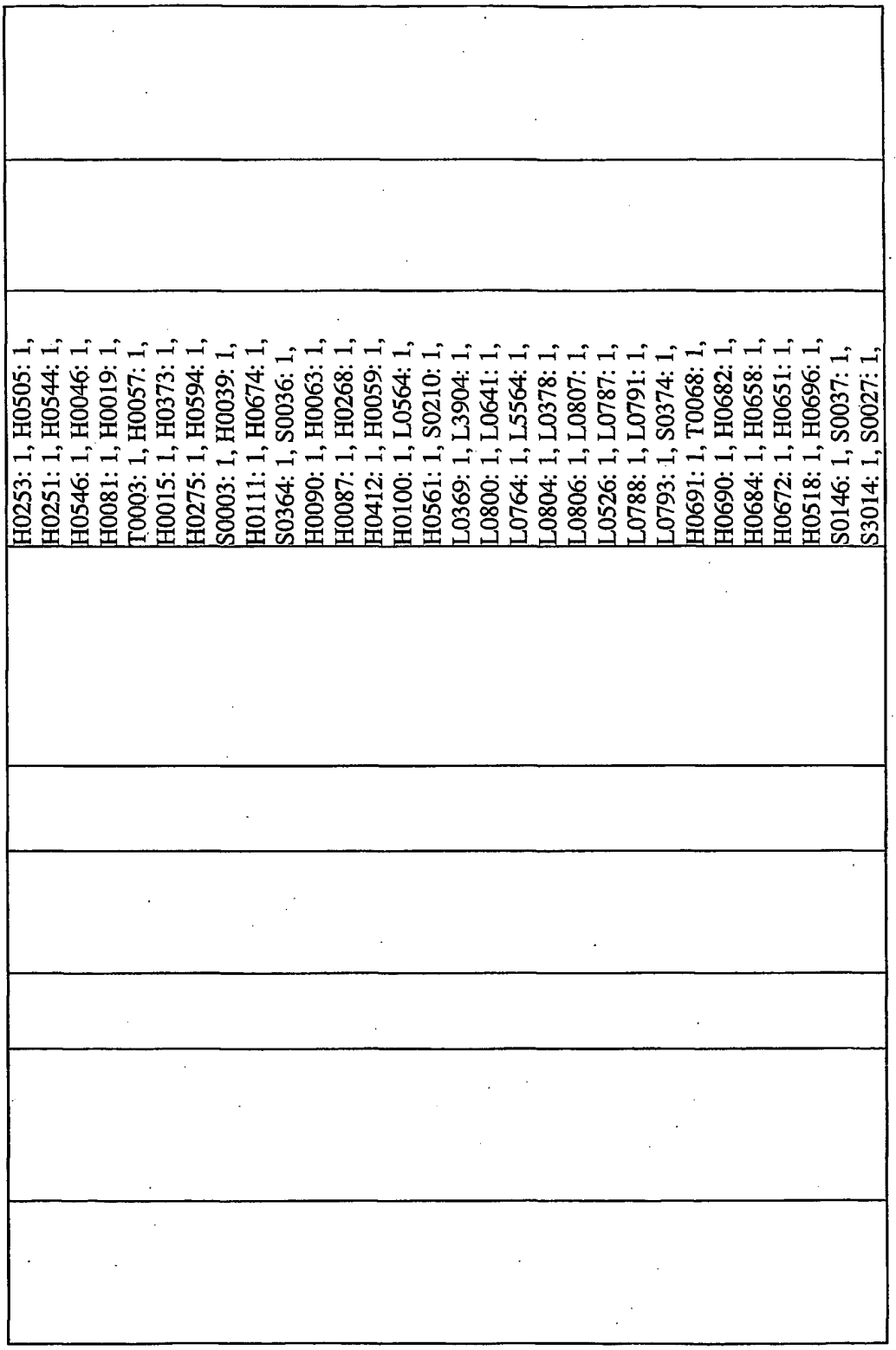
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HCONO25	HCONO25R	1100	218 - 610	3275		L0803: 15, L0766: 7, L0748: 6, L0809: 5, L0749: 5, L0804: 4, L0776: 4, L0754: 4, L0752: 4, L0805: 3, L0755: 3, S0438: 2, L0800: 2, L0662: 2, L0740: 2, L0751: 2, L0747: 2, L0750: 2, L0757: 2, L0615: 1, H0556: 1, S0278: 1, T0039: 1, H0318: 1, H0597: 1, H0009: 1, H0510: 1, H0553: 1, H0063: 1, H0509: 1, H0647: 1, S0144: 1, L0763: 1, L0770: 1, L0764: 1, L0768: 1, L0794: 1, L0775: 1, L0653: 1, L0661: 1, L0518: 1, L0790: 1,		

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HCONQ67	HCONQ67R	1102	1 - 669	3277	Gly-7 to Gly-21, Pro-145 to Arg-152, Ala-178 to Lys-183.			
HCONQ71	HCONQ71R	1103	312 - 488	3278				
HCONR31	HCONR31R	1104	3 - 380	3279	Gly-18 to Gln-39, Leu-49 to His-60, Glu-67 to Asp-92.			
HCONU03	HCONU03R	1105	3 - 575	3280				
HCONW62	HCONW62R	1106	1 - 429	3281	Thr-76 to Arg-92, Pro-113 to Ala-118.			
HCONW74	HCONW74R	1107	85 - 234	3282	Pro-15 to Tyr-21.			
HCONW90	HCONW90R	1108	2 - 151	3283	Asn-1 to Pro-10.			
HCONW95	HCONW95R	1109	44 - 457	3284				
HCOOB60	HCOOB60R	1110	101 - 352	3285				
HCOOG32	HCOOG32R	1111	2 - 334	3286				
HCOOG37	HCOOG37R	1112	3 - 482	3287				
HCOOH93	HCOOH93R	1113	1 - 426	3288				
HCOOI71	HCOOI71R	1114	1 - 354	3289	Ala-15 to Gln-25, Gly-42 to Asp-51, Gln-82 to Lys-87, Lys-113 to Lys-118.			
HCOOI79	HCOOI79R	1115	209 - 625	3290				

HCOOM18	HCOOM18R	1116	2 - 694	3291	Lys-71 to Glu-76, Ala-95 to Asp-100, Asp-113 to Ser-134.			
HCOOM73	HCOOM73R	1117	2 - 661	3292	Leu-33 to Lys-39.	H0012: 5, H0620: 4, H0622: 4, L0803: 4, H0670: 4, L0751: 4, L0770: 3, S6024: 2, S0222: 2, L0791: 2, L0731: 2, H0549: 1, H0438: 1, T0023: 1, H0477: 1, H0647: 1, L0648: 1, L0774: 1, L0659: 1, L0664: 1, L0665: 1, H0659: 1, H0658: 1, H0648: 1, H0651: 1, S0380: 1, L0748: 1, L0439: 1, L0756: 1, L0779: 1 and L0755: 1.		
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HCOOS39	HCOOS39R	1119	2 - 229	3294				
HCOOT43	HCOOT43R	1120	2 - 439	3295		L0743: 19, L0731: 13, L0744: 12, L0748: 11, L0666: 9, L0751: 9, L0664: 8, H0144: 8, H0333: 7, H0617: 7, L0769: 7, L0662: 7, S0022: 6, H0616: 6, H0087: 6, L0483: 5, H0181: 5, L0517: 5,		

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		T0114: 1, S0280: 1, L0021: 1, H0590: 1, H0004: 1, H0618: 1, S0010: 1, H0318: 1, S0049: 1, H0251: 1, H0596: 1, T0110: 1, H0327: 1, H0009: 1, H0123: 1, L0471: 1, H0006: 1, H0014: 1, H0051: 1, S0388: 1, H0510: 1, S0334: 1, H0687: 1, T0023: 1, T0006: 1, H0424: 1, H0182: 1, H0606: 1, H0383: 1, H0165: 1, H0166: 1, S0366: 1, H0135: 1, H0090: 1, T0067: 1, H0488: 1, H0412: 1, T0069: 1, S0112: 1, L0564: 1, H0494: 1, S0015: 1, H0561: 1, L0762: 1, L0640: 1, L0637: 1, L0761: 1, L0667: 1, L0772: 1, L0373: 1, L0646: 1, L0643: 1, L0374: 1, L0765: 1, L0773: 1, L0648: 1, L0521: 1, L0768: 1, L0364: 1, L0533: 1,				

L0650: 1, L0774: 1, L0376: 1, L0806: 1, L0652: 1, L0653: 1, L0606: 1, L0629: 1, L0659: 1, L0636: 1, L0542: 1, L0526: 1, L0518: 1, L0782: 1, L0783: 1, H0689: 1, H0690: 1, H0682: 1, H0683: 1, H0659: 1, H0660: 1, S0328: 1, S0330: 1, S0380: 1, H0522: 1, S0004: 1, H0555: 1, L0611: 1, S3014: 1, S0206: 1, L0755: 1, L0758: 1, H0444: 1, L0587: 1, L0589: 1, L0605: 1, L0591: 1, L0608: 1, L0361: 1, L0366: 1, H0665: 1, S0242: 1, S0194: 1, H0543: 1, H0423: 1, S0460: 1, S0456: 1 and H0506: 1.	Arg-13 to Val-20.	3296						

L0747: 5, H0542: 5, H0423: 5, H0624: 4, T0002: 4, H0486: 4, H0031: 4, H0169: 4, H0616: 4, L0770: 4, L0776: 4, L0666: 4, S0152: 4, L0754: 4, H0657: 3, H0663: 3, S0418: 3, S0358: 3, S0360: 3, H0038: 3, L0764: 3, L0648: 3, L0775: 3, L0655: 3, L0749: 3, L0750: 3, L0755: 3, S0026: 3, H0422: 3, H0170: 2, H0171: 2, H0341: 2, H0402: 2, H0638: 2, S0045: 2, S0046: 2, H0156: 2, S0182: 2, H0318: 2, L0471: 2, S0003: 2, H0168: 2, H0674: 2, H0090: 2, H0063: 2, H0412: 2, H0413: 2, H0100: 2, S0440: 2, L0769: 2, L0372: 2, L0662: 2, L0659: 2, H0547: 2, H0659: 2, S0328: 2, S0380: 2, H0521: 2, L0756: 2, L0758: 2,

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HCOOU56	HCOOU56R	1122	3 - 257	3297		S0210: 1, H0529: 1, L0520: 1, L0763: 1, L0637: 1, L0800: 1, L0765: 1, L0773: 1, L0521: 1, L0768: 1, L0364: 1, L0766: 1, L0806: 1, L0653: 1, L0657: 1, L0518: 1, L0783: 1, L0383: 1, L0663: 1, L0664: 1, H0593: 1, H0689: 1, H0682: 1, H0670: 1, H0666: 1, H0648: 1, H0672: 1, L0355: 1, H0522: 1, S0013: 1, H0696: 1, H0134: 1, H0214: 1, S0406: 1, L0609: 1, S3014: 1, S0206: 1, L0744: 1, L0751: 1, H0343: 1, L0591: 1, L0601: 1, S0242: 1, L0697: 1, S0424: 1 and S0446: 1.		
HCOOW72	HCOOW72R	1123	58 - 534	3298	Ala-20 to Asp-25, Asp-38 to Ser-59, Asn-103 to Glu-109, Pro-111 to Ser-119.				
HCOOX01	HCOOX01RA	1124	153 - 311	3299					

HCOOX07	HCOOX07R	1125	236 - 367	3300	His-15 to Gly-29.	L0751: 14, L0659: 11, H0695: 10, L0666: 10, L0757: 9, L0743: 8, L0779: 8, H0581: 6, L0769: 6, L0748: 6, L0758: 6, H0556: 5, H0402: 5, S0360: 5, H0014: 5, H0271: 5, L0761: 5, L0667: 5, L0774: 5, L0653: 5, S0406: 5, H0436: 5, S0358: 4, S0132: 4, L0763: 4, L0776: 4, L0809: 4, L0664: 4, S0126: 4, L0731: 4, S0280: 3, H0150: 3, H0687: 3, L0662: 3, L0775: 3, L0375: 3, H0670: 3, L0749: 3, S0434: 3, H0295: 2, H0650: 2, S0408: 2, H0580: 2, H0411: 2, H0586: 2, H0559: 2, H0545: 2, H0050: 2, S0051: 2, H0083: 2, H0416: 2, H0688: 2, H0617: 2, H0063: 2, H0551: 2, S0344: 2, L0643: 2, L0764: 2, L0766: 2, L0649: 2,		

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HCOOX48	HCOOX48R	1126	203 - 349	3301	Leu-13 to Gly-21, Ser-27 to Ser-42.	L0646: 1, L0642: 1, L0645: 1, L0771: 1, L0773: 1, L0648: 1, L0794: 1, L0805: 1, L0652: 1, L0661: 1, L0493: 1, L0635: 1, L0384: 1, L0788: 1, L0663: 1, S0052: 1, S0216: 1, S0374: 1, T0068: 1, H0689: 1, H0682: 1, H0659: 1, H0666: 1, H0672: 1, S0330: 1, H0539: 1, H0710: 1, H0521: 1, H0522: 1, H0696: 1, S0190: 1, S0404: 1, H0555: 1, L0744: 1, L0740: 1, L0756: 1, L0777: 1, L0759: 1, S0031: 1, H0595: 1, L0581: 1, L0361: 1 and S0194: 1.			
HCOOY43	HCOOY43R	1127	1 - 315	3302	Asn-67 to Arg-73, Thr-96 to Gly-102.				
HCOPA60	HCOPA60RA	1128	3 - 446	3303	Ala-1 to Leu-7, Gly-14 to Arg-19, Tyr-34 to Asp-41.	L0748: 4, L0747: 4, L0779: 4, H0620: 3, L0770: 3, L0774: 3, L0622: 2, S0280: 2,			

						H0271: 2, H0290: 2, L0769: 2, L0800: 2, L0794: 2, L0766: 2, L0775: 2, H0547: 2, S0126: 2, S0380: 2, L0752: 2, L0758: 2, L0596: 2, H0295: 1, S0212: 1, H0125: 1, H0559: 1, T0060: 1, T0082: 1, H0150: 1, N0006: 1, H0024: 1, S0022: 1, H0688: 1, H0428: 1, T0023: 1, H0033: 1, H0424: 1, H0213: 1, H0412: 1, H0413: 1, H0633: 1, S0344: 1, L0646: 1, L0768: 1, L0804: 1, L0656: 1, L0783: 1, L0809: 1, L0788: 1, L0666: 1, L0663: 1, L0438: 1, H0670: 1, H0660: 1, H0522: 1, S0037: 1, L0439: 1, L0750: 1, L0759: 1, S0031: 1 and S0196: 1.		
HCOPB03	HCOPB03R	1129	2 - 598	3304	Asp-28 to Glu-34, Ala-38 to Ile-44, Ala-64 to Arg-77, Gly-82 to Ala-88.			

HCOPC45	HCOPC45R	1130	3 - 89	3305				
HCOPD67	HCOPD67R	1131	26 - 541	3306	Phe-1 to Gly-7.			
HCOPE27	HCOPE27R	1132	2 - 400	3307	Arg-37 to Gly-44, Asp-76 to Gly-87.	L0751: 16, L0601: 10, L0659: 4, H0670: 4, L0665: 3, S0376: 2, H0494: 2, L0758: 2, L0596: 2, H0587: 1, H0646: 1, L0372: 1, L0646: 1, L0662: 1, L0552: 1, L0376: 1, L0806: 1, L0664: 1, H0682: 1, H0435: 1, H0672: 1 and L0744: 1.		
HCOPH51	HCOPH51RA	1133	243 - 398	3308				
HCOPI09	HCOPI09RA	1134	2 - 328	3309				
HCOPM42	HCOPM42R	1135	1 - 90	3310				
HCOPO34	HCOPO34R	1136	140 - 361	3311	Thr-6 to Cys-16, Tyr-40 to Lys-47, Ser-61 to Gln-66.			
HCOPO36	HCOPO36R	1137	143 - 601	3312	Arg-1 to Ser-7, Ser-25 to Phe-32, Leu-39 to Ser-44, Arg-58 to Gly-63, Ser-140 to Thr-145.	L0665: 3, H0682: 2, H0435: 2, L0751: 2, H0663: 1, L0021: 1, H0647: 1, L0806: 1, L0664: 1, H0683: 1, H0670: 1 and H0660: 1.		
HCOPO88	HCOPO88R	1138	1 - 267	3313	Pro-7 to Phe-15, Gly-26 to Arg-31, Asp-35 to Glu-43.			
HCOPV41	HCOPV41R	1139	3 - 620	3314	Arg-4 to Lys-9,			

					Asp-61 to Asn-67, Thr-69 to Lys-75, Leu-105 to Ala-112, Gly-126 to His-134, Gly-172 to Glu-179, Pro-186 to Asn-199.				
HCOPZ15	HCOPZ15R	1140	1 - 582	3315		AR096: 11, AR061: 10, AR104: 5, AR060: 5, AR089: 5, AR055: 4 L0774: 3, S0358: 2, H0509: 2, L0809: 2, H0670: 2, L0745: 2, L0779: 2, L0752: 2, H0449: 1, T0048: 1, H0355: 1, H0428: 1, H0617: 1, S0438: 1, H0529: 1, L0770: 1, L0761: 1, L0773: 1, L0803: 1, L0804: 1, L0375: 1, L0659: 1, L0382: 1, L0791: 1, S0328: 1, H0134: 1, L0743: 1, L0748: 1, L0747: 1 and L0756: 1.			
HCOQA38	HCOQA38R	1141	41 - 271	3316	His-39 to Asn-45, Cys-68 to Cys-75.				
HCOQA80	HCOQA80R	1142	1 - 192	3317	His-37 to Asp-42.				
HCOQB12	HCOQB12R	1143	1 - 582	3318	Lys-6 to Asp-11, Gly-22 to Phe-27,				

HCOQB56	HCOQB56R	1144	1 - 66	3319	His-54 to Gly-63, Asp-73 to Lys-79.	H0670: 2 and H0589: 1.			
HCOQB58	HCOQB58R	1145	281 - 466	3320	Lys-1 to Gln-7.				
HCOQC71	HCOQC71R	1146	3 - 248	3321	Lys-1 to Asp-21, Lys-61 to Leu-71.	L0794: 7, L0803: 5, L0809: 5, L0666: 5, L0751: 5, L0759: 3, H0674: 2, L0768: 2, L0774: 2, L0663: 2, L0779: 2, L0758: 2, S0360: 1, H0455: 1, H0618: 1, H0263: 1, H0169: 1, H0616: 1, H0059: 1, S0112: 1, L0451: 1, L0770: 1, L0639: 1, L0648: 1, L0804: 1, L0776: 1, L0783: 1, L0789: 1, L0790: 1, L0791: 1, L0664: 1, L0665: 1, H0670: 1, H0672: 1 and L0608: 1.			
HCOQD29	HCOQD29R	1147	1 - 570	3322	Glu-66 to Arg-72, Pro-148 to Ser-154.				
HCOQD38	HCOQD38R	1148	106 - 639	3323	Met-3 to Ser-16, Cys-25 to Asp-35, Glu-42 to Lys-52, Ser-55 to Glu-63, Glu-74 to Thr-79,				

HCOQD49	HCOQD49R	1149	8 - 196	3324	Ile-81 to Ser-102, Ser-109 to Glu-118, Thr-138 to Glu-158.	Asp-39 to Ser-46.	S0358: 15, S0003: 13, S0126: 11, L0754: 11, S0410: 10, H0599: 9, S0440: 9, H0529: 9, L0748: 9, H0341: 8, H0373: 8, H0591: 8, L0588: 8, L0362: 8, H0661: 7, S0007: 7, L0471: 7, L0731: 7, H0170: 6, T0042: 6, S0374: 6, H0624: 5, S0408: 5, H0013: 5, H0046: 5, H0031: 5, H0551: 5, H0144: 5, L0752: 5, H0657: 4, S0346: 4, S0214: 4, H0039: 4, H0644: 4, H0616: 4, H0413: 4, H0494: 4, H0670: 4, S0404: 4, S3014: 4, L0740: 4, L0747: 4, L0750: 4, L0753: 4, L0758: 4, L0581: 4, S0424: 4, S0040: 3, H0663: 3, H0638: 3, S0356: 3, S0360: 3, S0222: 3, H0497: 3,		

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S0152: 2, H0521: 2,
H0696: 2, S3012: 2,
L0749: 2, L0756: 2,
S0434: 2, L0593: 2,
L0594: 2, L0366: 2,
H0653: 2, H0543: 2,
H0506: 2, H0171: 1,
H0685: 1, H0716: 1,
T0049: 1, S0134: 1,
S0218: 1, H0583: 1,
H0254: 1, H0255: 1,
H0671: 1, H0664: 1,
H0305: 1, L0005: 1,
S0468: 1, H0208: 1,
S0045: 1, S0046: 1,
S6026: 1, H0351: 1,
H0411: 1, H0261: 1,
H0431: 1, H0455: 1,
H0586: 1, H0632: 1,
T0039: 1, L0586: 1,
H0098: 1, H0120: 1,
T0048: 1, S0182: 1,
S0049: 1, H0230: 1,
H0596: 1, T0115: 1,
H0546: 1, H0545: 1,
H0009: 1, H0178: 1,
H0572: 1, H0123: 1,
H0024: 1, H0275: 1,
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H0375: 1, H0288: 1,

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HCOQF77	HCOQF77R	1150	1 - 357	3325		H0444: 1, H0595: 1, L0608: 1, S0011: 1, H0668: 1, S0026: 1, H0136: 1, H0542: 1 and H0422: 1.			
HCOQG37	HCOQG37R	1151	3 - 395	3326	Pro-26 to Asn-34, Pro-50 to Pro-56, Arg-64 to Val-69, Val-97 to Lys-103.				
HCOQG47	HCOQG47R	1152	208 - 522	3327					
HCOQH46	HCOQH46R	1153	2 - 583	3328					
HCOQI14	HCOQI14R	1154	11 - 187	3329	Arg-10 to Ser-16.	L0777: 9, L0766: 5, L0748: 3, L0439: 3, H0599: 2, L0774: 2, L0747: 2, L0749: 2, L0779: 2, L0731: 2, H0305: 1, L0534: 1, H0675: 1, S0046: 1, H0004: 1, H0083: 1, L0456: 1, T0042: 1, S0344: 1, S0002: 1, L0369: 1, L0770: 1, L0773: 1, L0803: 1, L0776: 1, L0809: 1, L0791: 1, H0658: 1, H0670: 1, S3012: 1, L0756: 1, L0780: 1 and L0759: 1.			
HCOQI67	HCOQI67R	1155	1 - 126	3330					

HCOQJ06	HCOQJ06R	1156	8 - 457	3331				
HCOQJ07	HCOQJ07R	1157	3 - 707	3332				
HCOQJ36	HCOQJ36R	1158	149 - 328	3333		L0752: 4, H0156: 2, L0803: 2, L0776: 2, H0648: 2, L0439: 2, H0431: 1, H0575: 1, H0014: 1, T0023: 1, H0598: 1, H0591: 1, H0059: 1, L0772: 1, L0372: 1, L0764: 1, L0771: 1, L0773: 1, L0804: 1, L0774: 1, L0775: 1, L0375: 1, L0805: 1, L0629: 1, L0789: 1, L0665: 1, L0438: 1, H0658: 1, H0670: 1 and L0779: 1.		
HCOQJ79	HCOQJ79R	1159	1 - 471	3334				
HCOQK86	HCOQK86R	1160	1 - 519	3335				
HCOQL87	HCOQL87R	1161	3 - 398	3336				
HCOQM87	HCOQM87R	1162	3 - 143	3337	Arg-1 to Val-23.			
HCOQO79	HCOQO79R	1163	2 - 613	3338	Phe-94 to Glu-102, Gln-133 to Thr-140.			
HCOQP32	HCOQP32R	1164	3 - 149	3339				
HCOQS11	HCOQS11R	1165	75 - 443	3340				
HCOQU15	HCOQU15R	1166	2 - 430	3341	Asn-29 to Gly-38, Glu-50 to Gln-58.	L0665: 4, L0743: 4, H0486: 3, H0123: 3, H0024: 3, L0528: 3, L0748: 3, H0170: 2,		

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				3342	Ile-3 to Arg-8, Pro-17 to Ser-22,		L0805: 7, L0776: 4, L0748: 4, H0545: 3,	
			46 - 315					
		1167						
	HCOQU92R							
HCOQU92								

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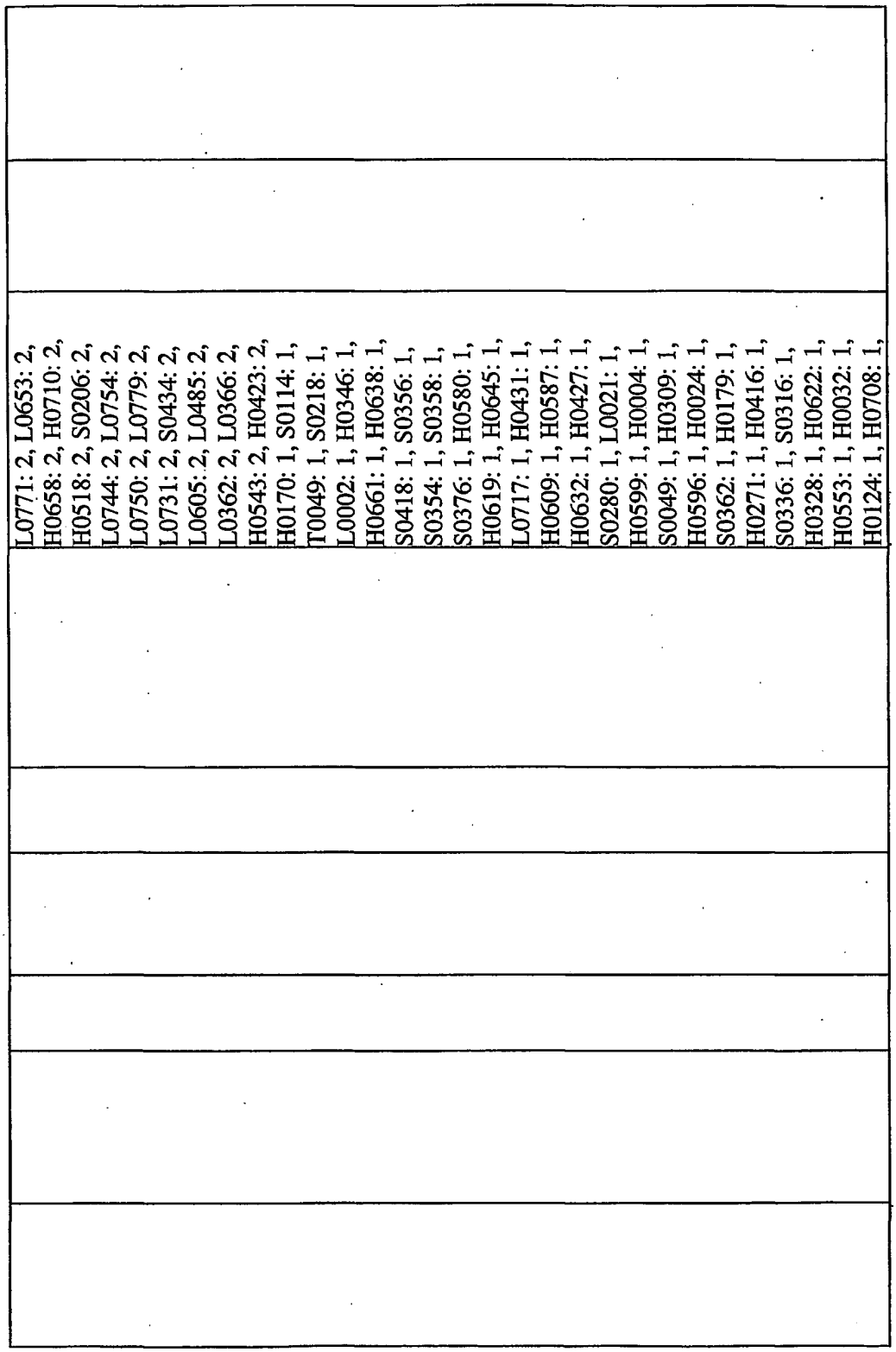
HCOQV27	HCOQV27R	1168	3 - 239	3343	Glu-1 to Lys-17, Val-25 to Asn-30, Phe-36 to Pro-42.	H0250: 35, L0770: 9, H0635: 6, L0483: 6, L0766: 6, H0521: 6, L0745: 6, S0003: 5, H0623: 5, L0776: 5, H0445: 5, S0408: 4, H0411: 4, H0634: 4, H0641: 4, L0598: 4, H0650: 3, H0656: 3, S0360: 3, H0574: 3, H0486: 3, H0373: 3, H0687: 3, H0591: 3, H0040: 3, L0662: 3, L0775: 3, L0665: 3, S0216: 3, L0748: 3, L0777: 3, S0134: 2, H0663: 2, S0007: 2, H0550: 2, H0013: 2, H0581: 2, H0510: 2, S0214: 2, H0615: 2, H0674: 2, S0440: 2,		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HCOQY43	HCOQY43R	1171	271 - 510	3346		S0282: 1, L0021: 1, S0438: 1, L0775: 1, L0666: 1, L0663: 1,		

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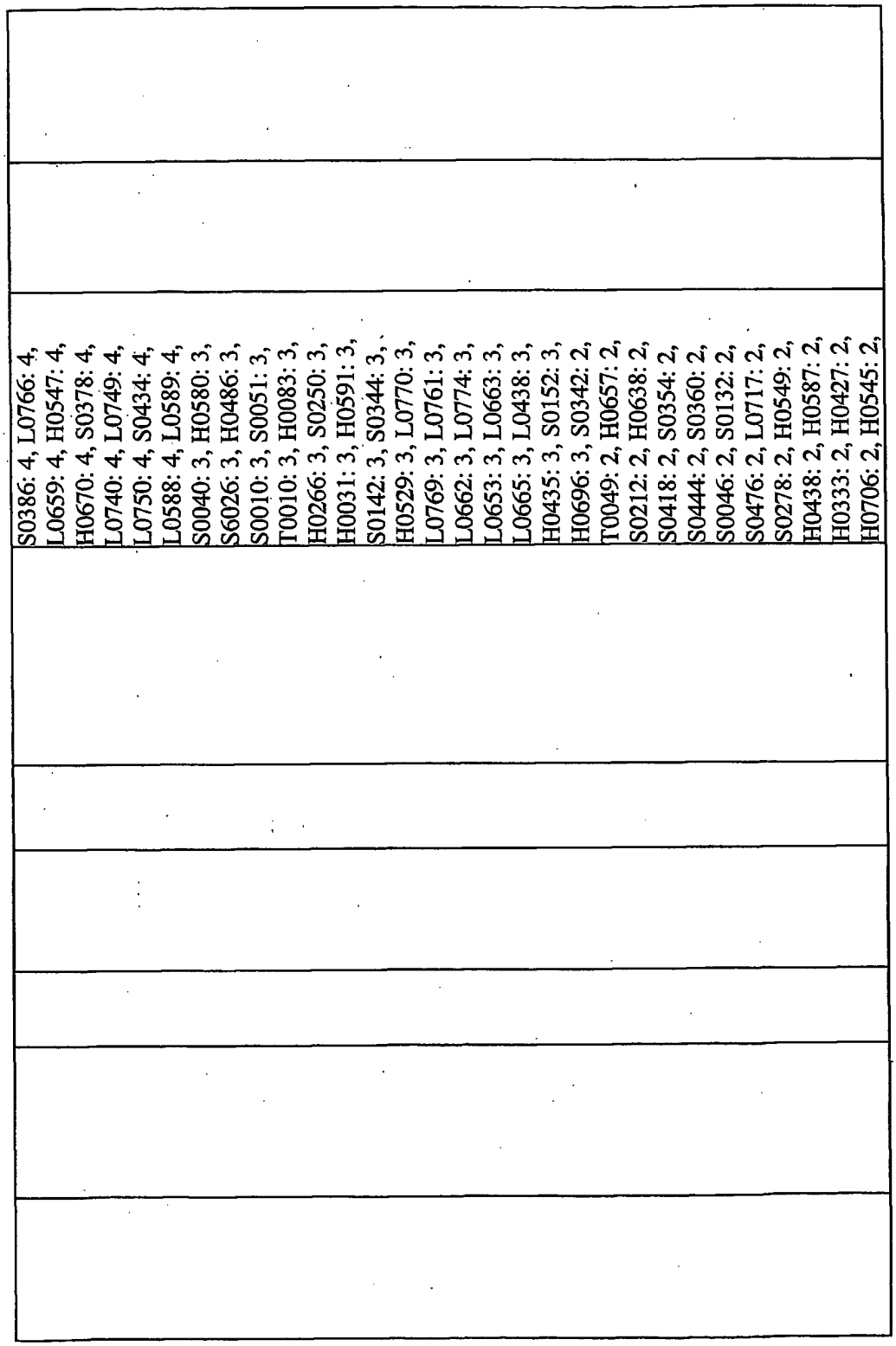
HCOQZ02	HCOQZ02R	1172	387 - 473	3347	Lys-1 to Lys-13.			
HCOQZ86	HCOQZ86R	1173	1 - 507	3348				
HCORA95	HCORA95R	1174	2 - 136	3349	Pro-1 to Phe-15.			
HCORB20	HCORB20R	1175	14 - 292	3350	Val-1 to Gly-9.			
HCORB43	HCORB43R	1176	1 - 303	3351				
HCORB66	HCORB66R	1177	3 - 611	3352	Asn-1 to Gly-8.			
HCORI18	HCORI18R	1178	105 - 317	3353	Asn-7 to Pro-33, Gly-40 to Gly-46, Tyr-49 to Tyr-71.	L0770: 3, H0685: 1, H0581: 1, H0553: 1, S0150: 1 and H0670: 1.		
HCORI25	HCORI25R	1179	3 - 419	3354	Leu-35 to Tyr-40.	L0754: 14, H0052: 13, L0748: 13, H0556: 12, L0591: 12, L0755: 11, L0752: 10, L0731: 9, L0601: 9, L0439: 8, L0777: 8, L0596: 8, H0046: 7, H0521: 7, L0758: 7, H0599: 6, H0622: 6, S0002: 6, L0646: 6, L0593: 6, H0265: 5, S0474: 5, L0776: 5, L0666: 5, L0741: 5, L0747: 5, S0026: 5, H0543: 5, H0619: 4, S0222: 4, H0013: 4, H0590: 4, H0544: 4, H0620: 4, H0124: 4, H0038: 4,		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HCRME42	HCRME42R	1181	1 - 537	3356	Lys-14 to Gly-26, Glu-33 to Arg-44, Pro-64 to Pro-69, Pro-79 to Asn-88, Thr-109 to Pro-123.				
HDABR53	HDABR53R	1182	2 - 463	3357					
HDLBE03	HDLBE03R	1183	158 - 325	3358	Ala-17 to Asn-23.				
HDPFI26	HDPFI26R	1184	37 - 303	3359	Ser-1 to Thr-8,				

HDTAQ74	HDTAQ74R	1185	133 - 414	3360	Glu-17 to Ala-32, Arg-39 to Trp-47.	L0759: 10, L0774: 3, H0648: 3, H0686: 2, S0360: 2, L0622: 2, H0486: 2, L0521: 2, L0775: 2, H0659: 2, S0328: 2, L0779: 2, L0755: 2, H0341: 1, S0354: 1, S0358: 1, H0351: 1, S0222: 1, L0021: 1, H0025: 1, L0105: 1, T0115: 1, H0545: 1, H0571: 1, H0050: 1, L0471: 1, S6028: 1, S0003: 1, H0031: 1, H0316: 1, H0038: 1, H0087: 1, H0494: 1, H0509: 1, S0142: 1, L0520: 1, L0769: 1, L0638: 1, L0772: 1, L0794: 1, L0803: 1, L0804: 1, L0382: 1, L0367: 1, L0665: 1, S0374: 1, H0690: 1, H0684: 1, S0044: 1, S3012: 1, S0027: 1, L0744: 1, L0777: 1, L0758: 1, L0604: 1, S0026: 1 and		

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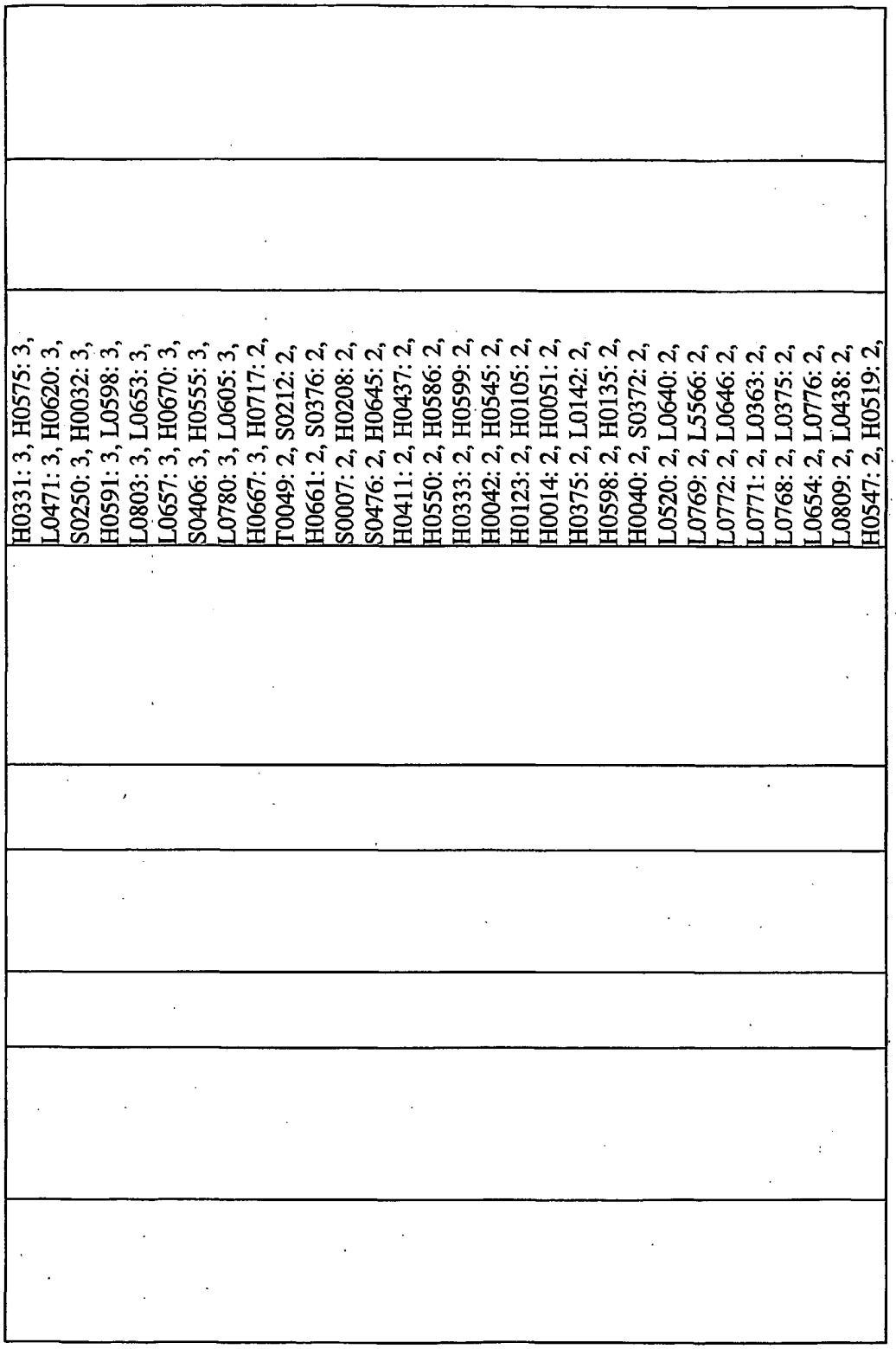
HDTDB88	HDTDB88R	1188	102 - 215	3363	Tyr-25 to Phe-32.				
HDTJR38	HDTJR38R	1189	179 - 364	3364		L0748: 50, L0754: 42, L0731: 31, H0644: 30, L0747: 29, H0551: 22, S0418: 21, L0659: 17, H0619: 15, L0663: 14, L0666: 13, S0360: 10, H0622: 10, H0031: 10, H0553: 10, L0662: 10, S0126: 10, L0757: 10, L0603: 10, S0420: 8, H0486: 8, H0013: 8, H0050: 8, H0623: 8, L0717: 7, H0144: 7, L0770: 6, L0750: 6, H0427: 5, H0024: 5, H0328: 5, H0030: 5, L0773: 5, L0665: 5, L0749: 5, H0713: 4, T0039: 4, S0280: 4, H0012: 4, H0038: 4, L0794: 4, L0774: 4, L0775: 4, L0805: 4, H0624: 3, H0170: 3, H0171: 3, S0356: 3, H0329: 3, S0046: 3,			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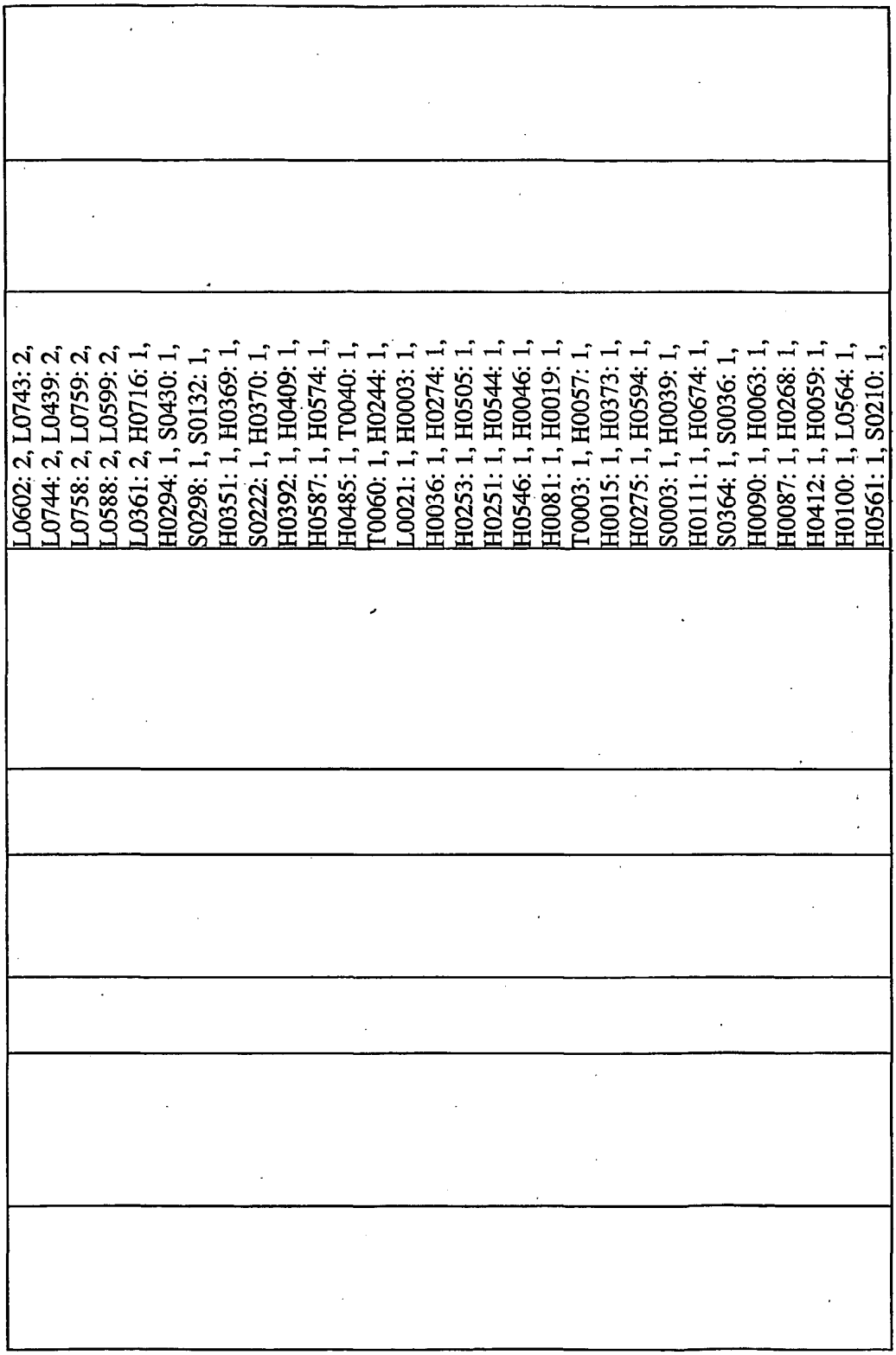
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HE9QU94	HE9QU94R	1191	3 - 170	3366	Arg-1 to Cys-23, Trp-25 to Ser-35.			
HEAHF02	HEAHF02R	1192	32 - 376	3367	Ser-10 to Thr-34, Ser-37 to Asn-89.			
HEEAY40	HEEAY40R	1193	3 - 128	3368	Thr-15 to Ser-26.			

HEGAF68	HEGAF68R	1194	45 - 221	3369	Glu-9 to Gly-17.			
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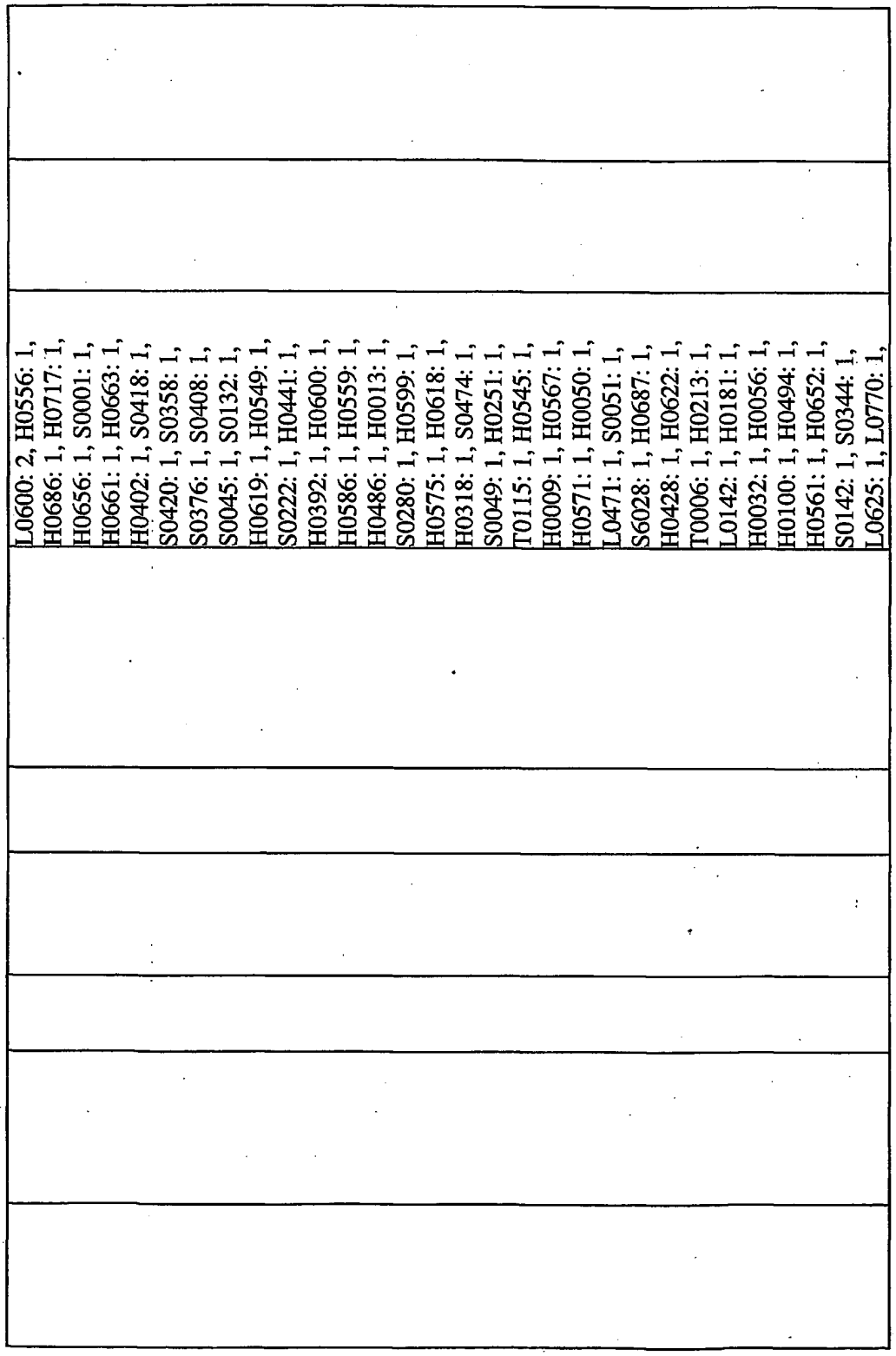
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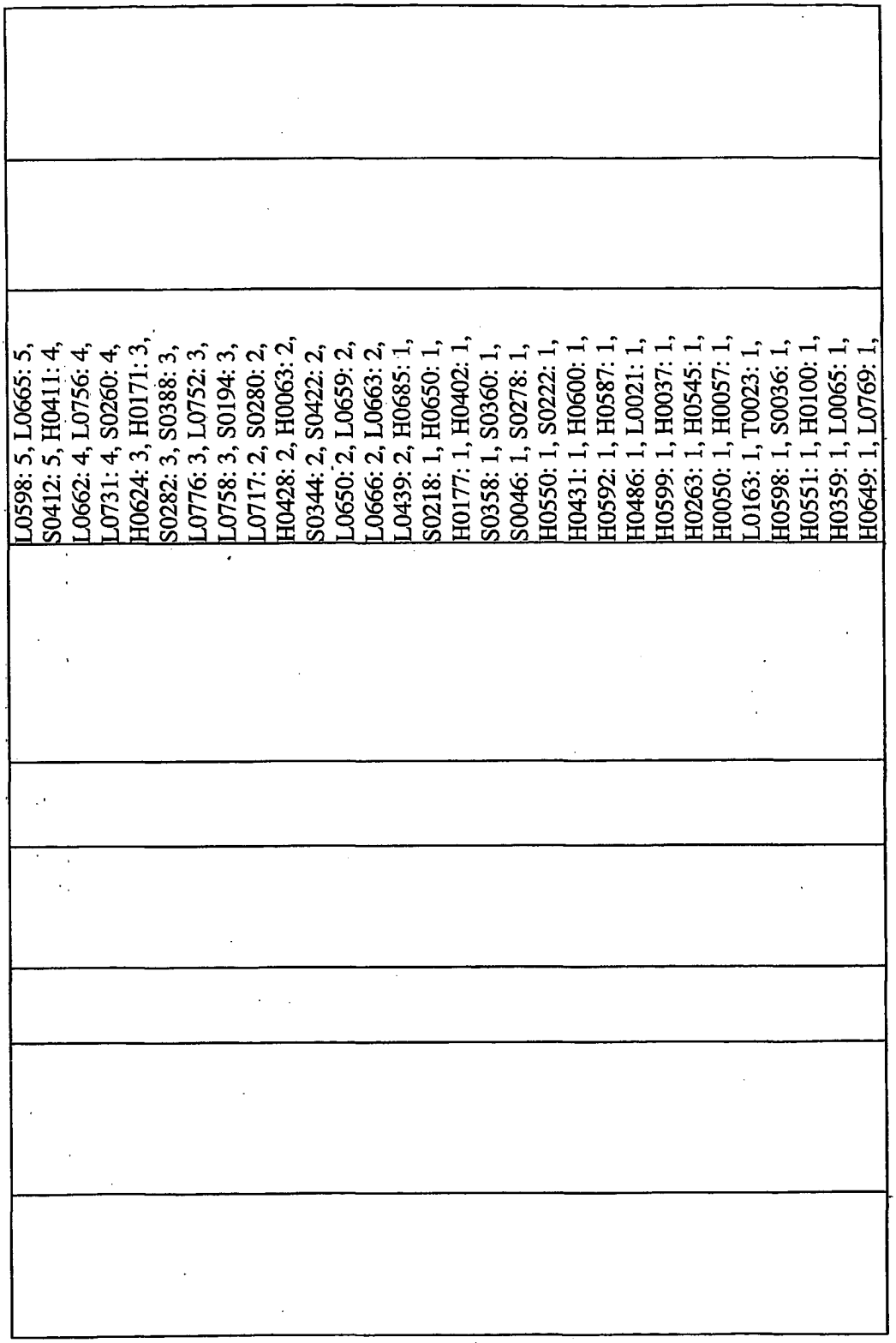
HFADS75	HFADS75R	1197	102 - 365	3372	Ala-16 to Arg-26, Pro-68 to Gly-78.			
HFIBG63	HFIBG63R	1198	2 - 409	3373				
HFIJB15	HFIJB15R	1199	32 - 151	3374				
HFIXK57	HFIXK57R	1200	2 - 211	3375		H0594: 18, L0777: 10, L0766: 6, H0595: 6, H0170: 5, H0373: 5,		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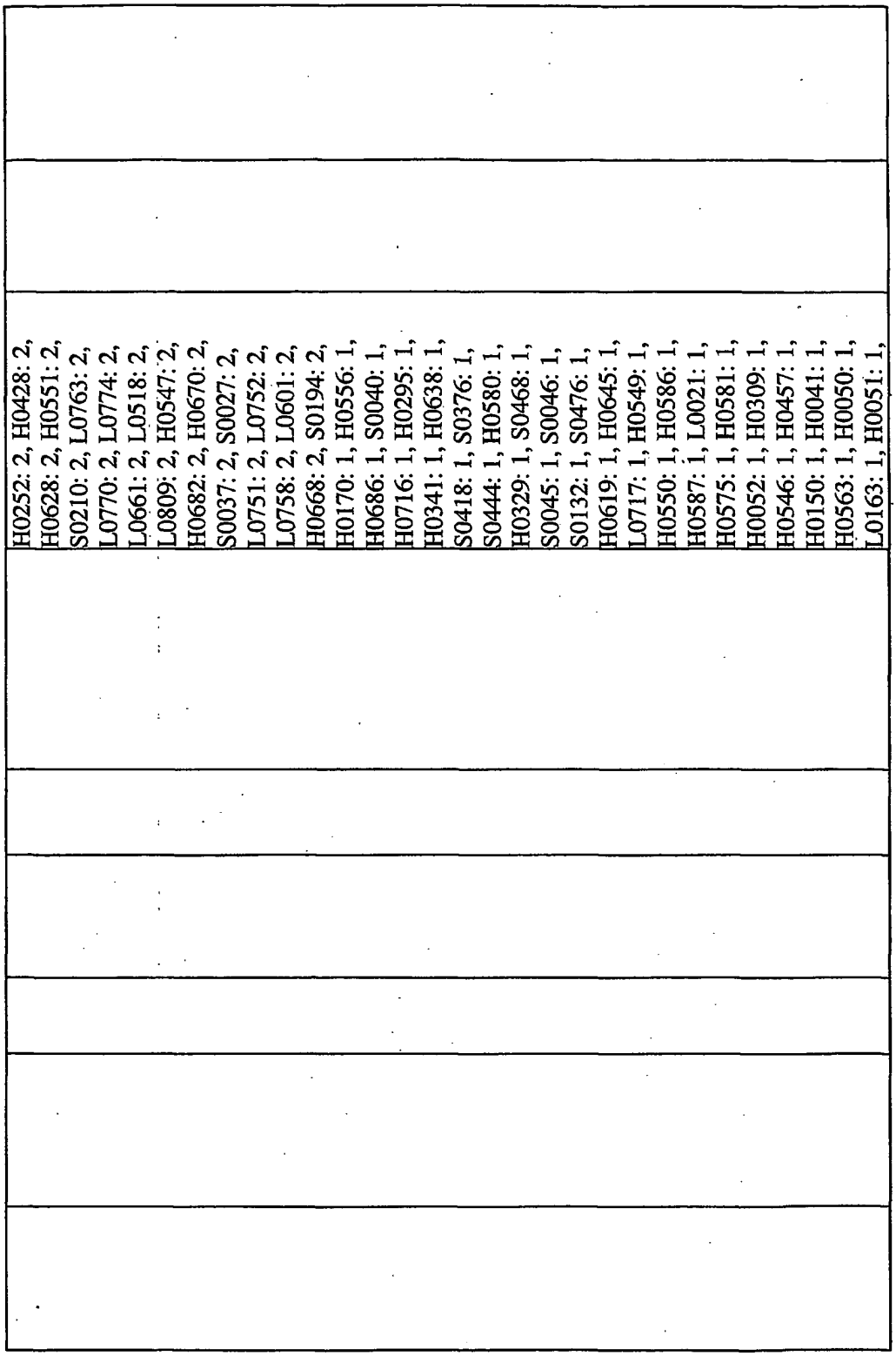
HFIZQ64	HFIZQ64R	1201	18 - 137	3376	Glu-27 to Leu-36.				
HFKKK36	HFKKK36R	1202	3 - 86	3377	Pro-3 to Tyr-22.				
HFPEC93	HFPEC93R	1203	75 - 233	3378	Lys-17 to Thr-23.				
HFPIX37	HFPIX37R	1204	1 - 270	3379	Pro-75 to Cys-89.	AR089: 4, AR096: 3, AR033: 3, AR060: 3, AR061: 1, AR104: 1, AR055: 1, AR053: 0, AR039: 0, AR052: 0 H0583: 1, H0662: 1, S0222: 1, S0049: 1, H0272: 1, H0670: 1, H0521: 1, H0555: 1 and S0436: 1.			
HFTDK36	HFTDK36R	1205	18 - 314	3380	Cys-5 to Pro-21,				

					His-66 to Leu-77, Gln-80 to Ala-88, Tyr-92 to Ser-98.				
HFVIB28	HFVIB28R	1206	11 - 250	3381					
HFXGR60	HFXGR60R	1207	353 - 57	3382		S0001: 1			
HHAUD07	HHAUD07R	1208	304 - 426	3383	Val-24 to Leu-31.				
HHBFO21	HHBFO21R	1209	54 - 230	3384					
HHEVG50	HHEVG50R	1210	1 - 474	3385					
HHFGQ65	HHFGQ65RA	1211	53 - 277	3386	Arg-2 to Ser-7.				
HHFOE48	HHFOE48RP 00B	1212	181 - 426	3387		H0666: 13, S0358: 10, H0620: 10, L0750: 8, L0747: 7, L0731: 7, H0135: 5, L0659: 5, L0740: 5, L0757: 5, S0360: 4, H0123: 4, S0022: 4, L0666: 4, L0665: 4, S0028: 4, L0748: 4, L0777: 4, L0588: 4, H0265: 3, S0420: 3, H0208: 3, H0545: 3, H0046: 3, H0024: 3, H0284: 3, H0100: 3, L0650: 3, L0375: 3, L0382: 3, H0651: 3, L0755: 3, H0352: 3, S0278: 2, H0592: 2, H0333: 2, H0253: 2, H0544: 2, H0081: 2, H0012: 2, H0266: 2, H0286: 2,			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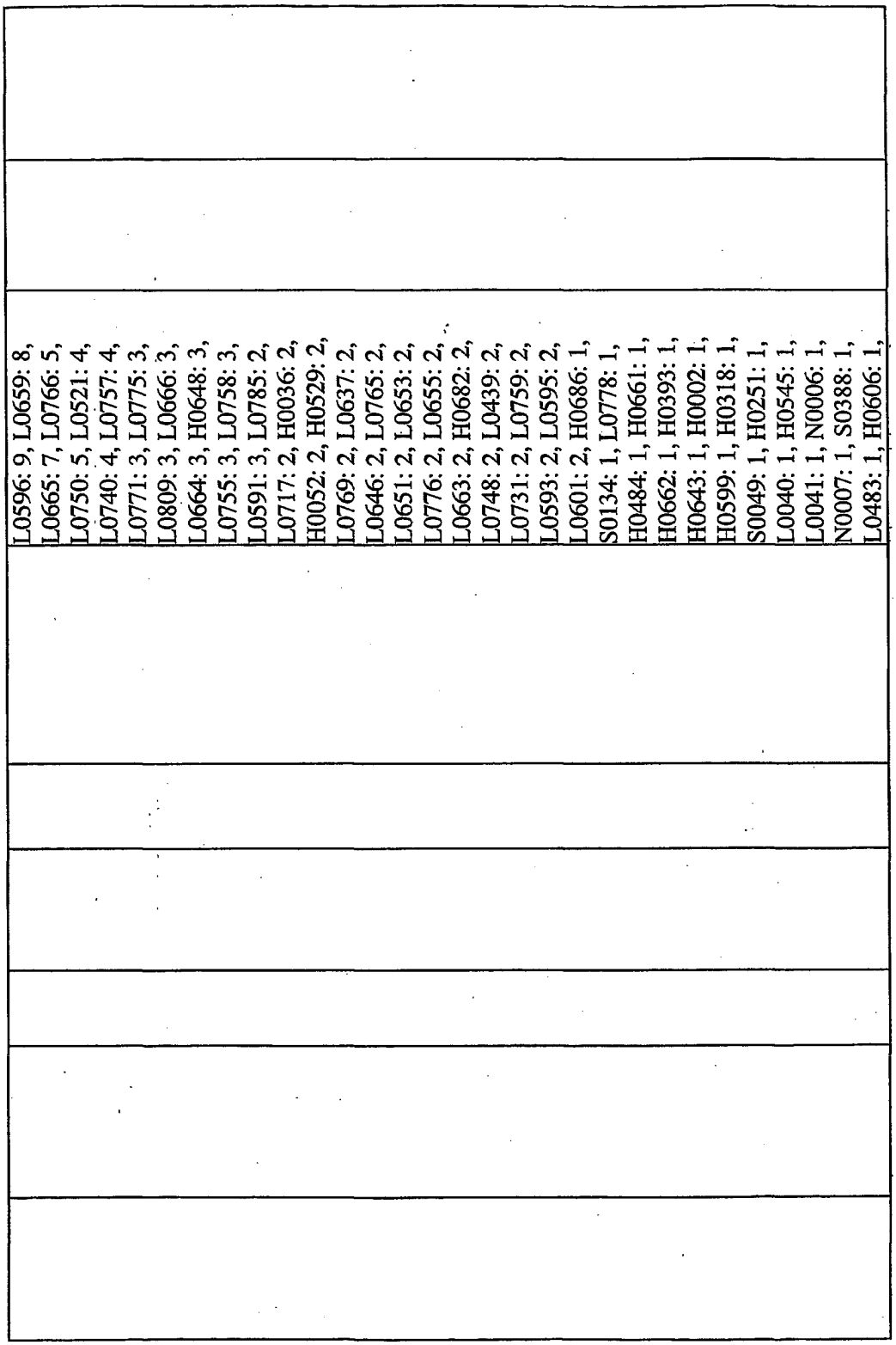
HHSFG15	HHSFG15R	1213	3 - 62	3388				
HHSGP15	HHSGP15R	1214	77 - 142	3389				
HHSGQ17	HHSGQ17R	1215	112 - 270	3390				
HKBAD05	HKBAD05R	1216	49 - 315	3391	Pro-13 to Leu-18, Leu-37 to Arg-42, Lys-65 to Gly-77.			
HKZAD21	HKZAD21R	1217	244 - 405	3392				
HKZAE07	HKZAE07R	1218	1 - 138	3393	Val-40 to Tyr-46.	L0752: 11, L0662: 9,		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HKZAI14	HKZAI14R	1220	3 - 368	3395	Lys-47 to Glu-52, Ala-71 to Asp-76, Asp-89 to Ser-110.			

HKZAI68	HKZAI68RA	1221	2 - 79	3396	Ser-9 to Ala-15.	S0474: 22, S0360: 13, H0556: 11, S0358: 11, L0747: 11, H0087: 10, S0126: 10, H0124: 9, S0410: 8, S0278: 8, H0024: 8, L0588: 8, S0206: 7, S0046: 6, L0731: 6, H0543: 6, H0265: 5, S0212: 5, S0045: 5, H0620: 5, H0594: 5, H0090: 5, H0063: 5, H0551: 5, T0042: 5, L0530: 5, H0144: 5, H0696: 5, S3014: 5, L0758: 5, S0192: 5, S0116: 4, H0549: 4, H0013: 4, H0530: 4, H0544: 4, H0081: 4, L0471: 4, H0012: 4, H0644: 4, H0163: 4, H0412: 4, H0100: 4, L0769: 4, L0771: 4, S0027: 4, L0740: 4, L0757: 4, L0605: 4, H0423: 4, H0624: 3, H0713: 3, S0418: 3, S0444: 3, S0408: 3, H0251: 3, H0545: 3, S0051: 3, H0083: 3, H0290: 3,		

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HKZAQ39	HKZAQ39R	1222	1 - 480	3397	Ser-1 to Lys-6, Asp-48 to Gly-55, Pro-68 to Phe-76, Pro-83 to Gly-89, Asn-100 to Asp-108, Glu-134 to Lys-141, Lys-144 to Asp-160.	H0668: 1, H0653: 1, H0542: 1, H0422: 1, S0042: 1, S0456: 1 and S0446: 1.		
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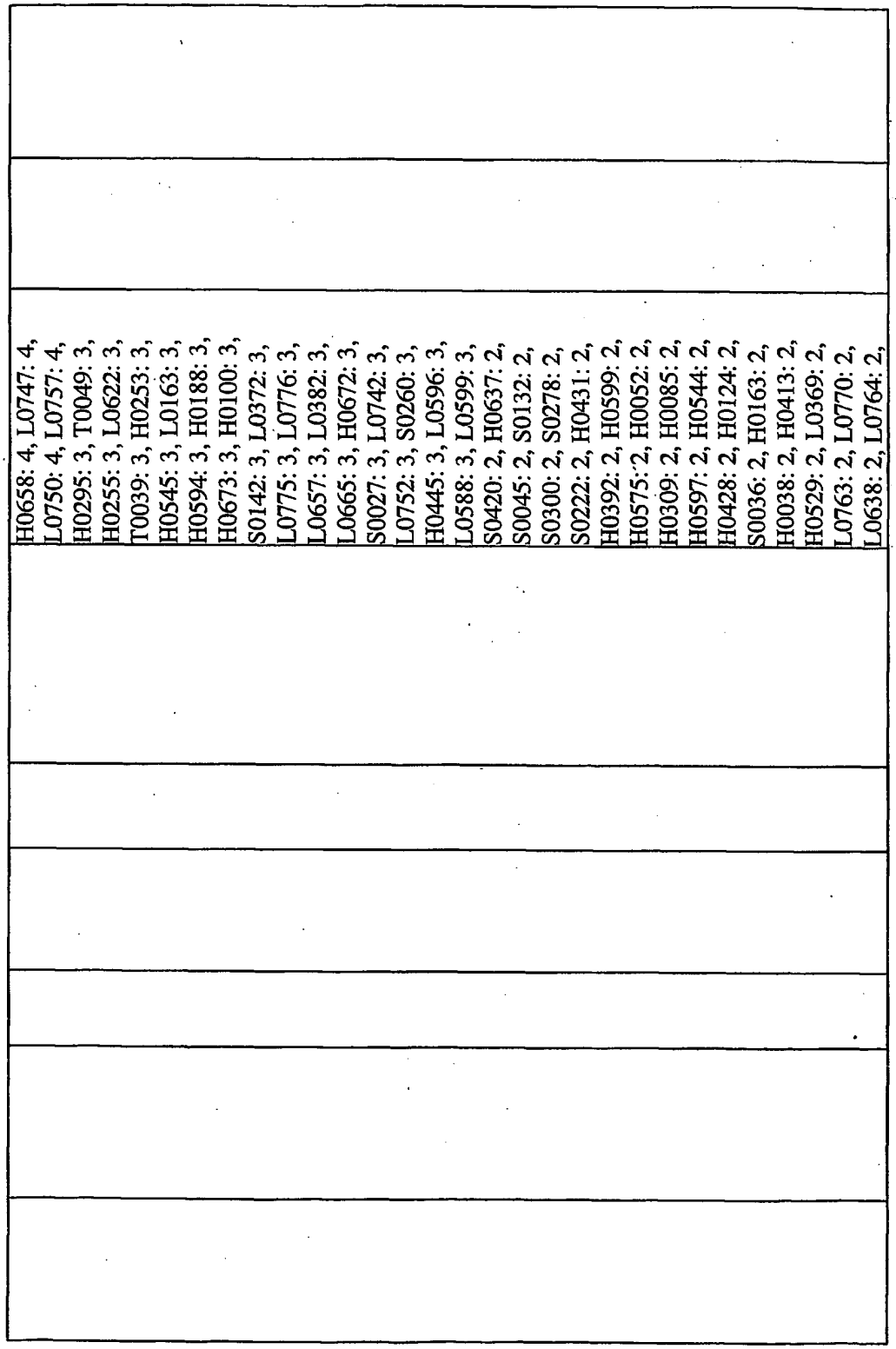
HKZAS59	HKZAS59R	1224	1 - 462	3399	Gln-54 to Leu-59, Glu-70 to Lys-76, Lys-147 to Ser-154.			
HKZAS64	HKZAS64R	1225	1 - 276	3400	Asp-1 to His-35, Pro-67 to His-75.			
HKZAS84	HKZAS84R	1226	2 - 103	3401	Ser-11 to Gly-18.	L0743: 19, L0731: 13, L0744: 12, L0748: 11, L0666: 9, L0751: 9, L0664: 8, H0144: 8, H0333: 7, H0617: 7, L0769: 7, L0662: 7, S0022: 6, H0616: 6, H0087: 6, L0483: 5, H0181: 5, L0517: 5, L0519: 5, L0754: 5, H0677: 5, S0051: 4, S0344: 4, L0663: 4,		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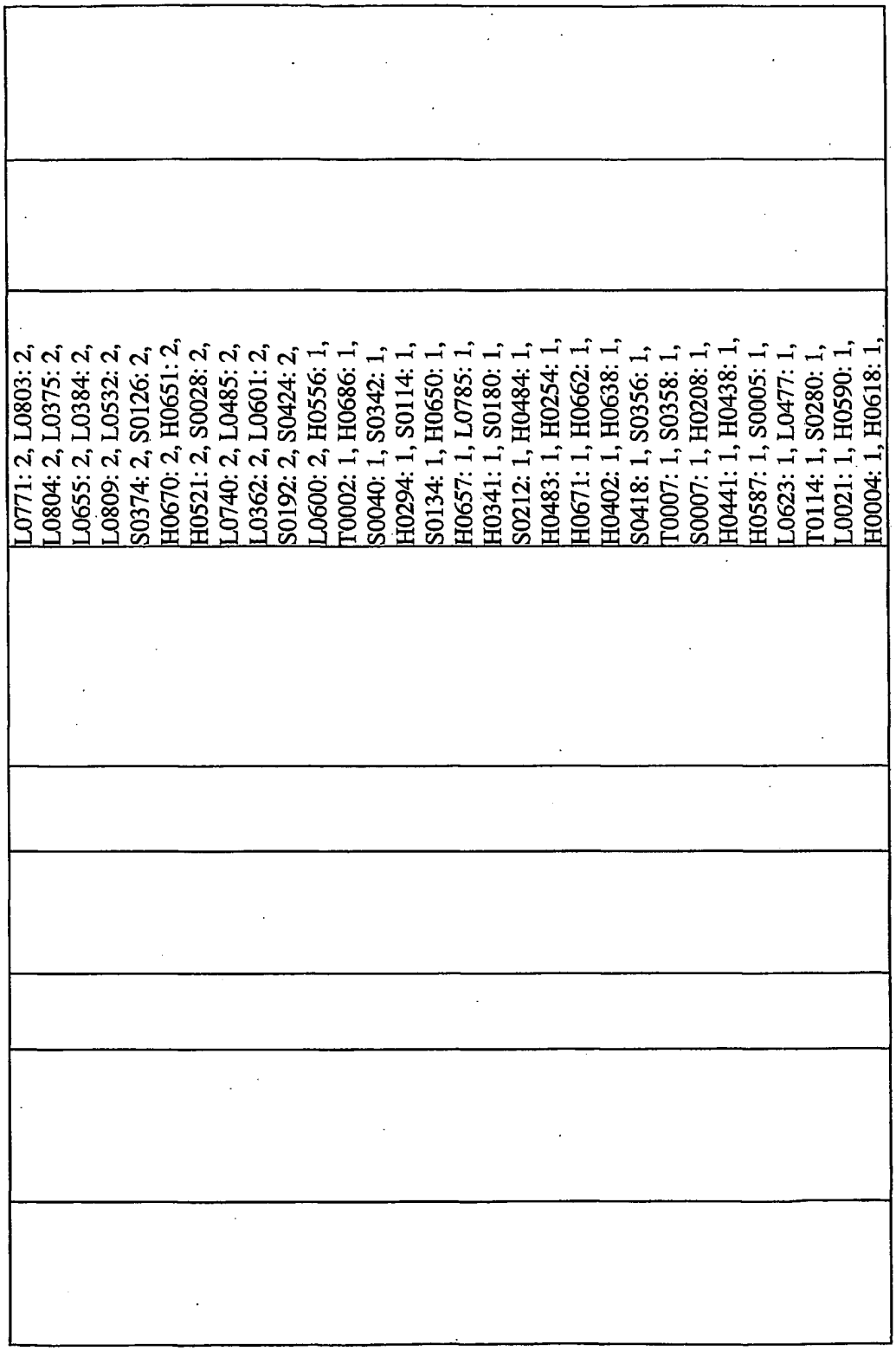
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HKZAV69	HKZAV69R	1227	2 - 412	3402	Val-6 to Lys-13, Tyr-23 to Asn-33, Lys-46 to Lys-51, Leu-75 to Asn-85, Asp-101 to Glu-106.				
HKZAV72	HKZAV72R	1228	2 - 163	3403	Cys-1 to Val-33, Ala-47 to Glu-54.				
HKZAX48	HKZAX48R	1229	137 - 361	3404		L0771: 3, L0021: 1, S0036: 1, H0689: 1 and			

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HKZBB22	HKZBB22R	1230	2 - 520	3405	Arg-5 to Leu-11, Arg-32 to Lys-39, Thr-117 to Lys-122.		
HKZBS89	HKZBS89R	1231	1 - 381	3406	Gln-41 to His-48, Leu-55 to Gly-61, Pro-71 to Gly-79, Ala-104 to His-111.		
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HLDXE19	HLDXE19R	1233	2 - 190	3408	Ala-2 to Lys-12.		
HLICD55	HLICD55R	1234	2 - 151	3409			
HLJBI32	HLJBI32R	1235	430 - 648	3410			
HLJBI37	HLJBI37R	1236	144 - 398	3411	Pro-77 to Lys-85.		
HLTHA47	HLTHA47R	1237	118 - 411	3412	Pro-82 to Lys-92.		
HLTJA50	HLTJA50R	1238	331 - 585	3413			
HLWAC95	HLWAC95R	1239	2 - 337	3414	Gln-20 to Ser-30.		
HLWDZ38	HLWDZ38R	1240	57 - 275	3415	Phe-45 to Ser-51.		
HLYDI57	HLYDI57R	1241	2 - 238	3416			
HMCFO19	HMCFO19R	1242	131 - 199	3417			
HMCIZ44	HMCIZ44R	1243	67 - 225	3418	Lys-17 to Thr-23.		
HMCJE25	HMCJE25R	1244	3 - 161	3419	Met-40 to Thr-52.		
HMSPB25	HMSPB25R	1245	324 - 145	3420			
HMVBB04	HMVBB04R	1246	136 - 276	3421	Lys-18 to Lys-30.		
HNAAE01	HNAAE01R	1247	2 - 196	3422	Lys-18 to Lys-30.		
HNBUP08	HNBUP08R	1248	127 - 474	3423	Pro-37 to Arg-46, Gln-75 to Gly-81, Pro-83 to Ser-89.	L0766: 5, L0751: 4, H0662: 2, H0253: 2, L0754: 2, L0750: 2, H0170: 1, H0587: 1, H0327: 1, H0688: 1,	

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HNBUY37	HNBUY37R	1249	2 - 289	3424		L0783: 4, S0280: 2, H0662: 1, H0550: 1, L0764: 1, L0662: 1, L0809: 1 and H0684: 1.		
HNBVL57	HNBVL57R	1250	179 - 541	3425				
HNHBC18	HNHBC18R	1251	1 - 279	3426	Glu-18 to Asp-35, Leu-52 to Gly-82.			
HNJFE85	HNJFE85R	1252	2 - 454	3427				
HNKCO29	HNKCO29R	1253	1 - 351	3428				
HNOAA22	HNOAA22R	1254	33 - 425	3429				
HNOAB27	HNOAB27R	1255	397 - 621	3430				
HNOAB28	HNOAB28R	1256	116 - 232	3431				
HNOAB88	HNOAB88R	1257	3 - 551	3432				
HNOAC04	HNOAC04R	1258	112 - 219	3433				
HNOAC15	HNOAC15R	1259	1 - 138	3434	Thr-1 to Ser-8, Pro-22 to Ser-27.			

HNOAE50	HNOAE50R	1260	89 - 577	3435	Thr-5 to Thr-14, Arg-20 to His-25, Arg-35 to Gly-40, Lys-58 to Arg-66, His-101 to Ser-107, Arg-111 to Lys-125, Leu-131 to Glu-140.			
HNOAE65	HNOAE65R	1261	2 - 535	3436	Pro-13 to Arg-21, Ser-42 to Phe-52, Lys-69 to Val-77, Ile-82 to Glu-87, Gly-93 to Gln-99, Val-118 to Asn-124, Lys-143 to Leu-152, Arg-154 to Glu-178.			
HNOAF22	HNOAF22R	1262	67 - 555	3437	Thr-5 to Thr-14, Arg-20 to His-25, Arg-35 to Gly-40, Lys-58 to Arg-66, His-101 to Ser-107, Arg-111 to Lys-125, Leu-131 to Arg-139, Arg-145 to Leu-153.			
HNOAF36	HNOAF36R	1263	2 - 145	3438	Arg-11 to Pro-17.	H0651: 2		
HNOAG34	HNOAG34R	1264	42 - 362	3439				
HNOAG94	HNOAG94R	1265	28 - 177	3440				
HNOAH67	HNOAH67R	1266	2 - 364	3441				
HNOAJ67	HNOAJ67R	1267	3 - 524	3442	Cys-2 to Gly-7.			
HNOAJ76	HNOAJ76R	1268	351 - 536	3443	Trp-6 to Glu-12.	H0134: 9, L0771: 8,		

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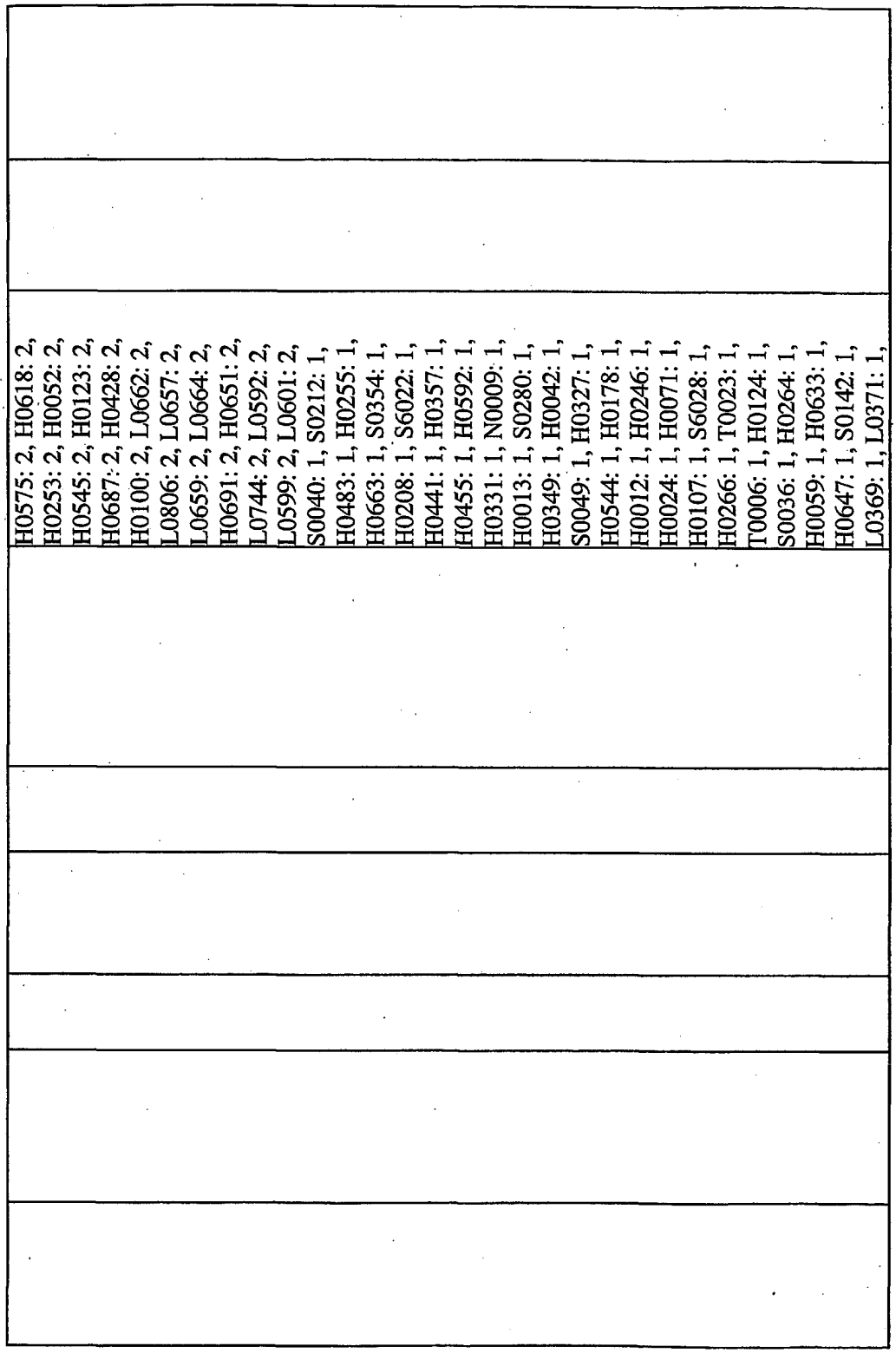
HNOAK11	HNOAK11R	1269	2 - 157	3444					
HNOAL51	HNOAL51R	1270	43 - 207	3445					
HNOAN85	HNOAN85R	1271	1 - 180	3446					
HNOAO59	HNOAO59R	1272	403 - 759	3447	Phe-74 to Pro-81.				
HNOAO71	HNOAO71R	1273	2 - 283	3448	Gly-1 to Leu-6, Pro-47 to Asp-52, Lys-63 to Glu-68.				
HNOAP21	HNOAP21R	1274	2 - 730	3449	Arg-9 to Arg-27, Gly-43 to Lys-48, Asp-61 to Ser-67, Ala-124 to Gly-130, Thr-146 to Lys-151, Phe-165 to Lys-170.				
HNOAQ24	HNOAQ24R	1275	2 - 664	3450			L0666: 10, H0510: 8, H0046: 6, H0617: 6, S0051: 4, H0135: 4, L0776: 4, L0439: 4, H0509: 3, L0665: 3, L0747: 3, H0445: 3, H0662: 2, S0420: 2, S0222: 2, H0574: 2, H0632: 2, H0427: 2,		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HNOAQ47	HNOAQ47R	1276	1 - 642	3451	Ser-15 to Glu-23, Val-33 to Gly-40, Arg-47 to Pro-59, Ser-64 to Phe-70, Gly-92 to Lys-97, Lys-155 to Glu-166.			
HNOAR74	HNOAR74R	1277	122 - 400	3452	Pro-5 to Gly-11, Ser-20 to Ser-27.	L0794: 3, H0657: 2, L0766: 2, L0783: 2, L0789: 2, L0777: 2, L0759: 2, H0656: 1, S0116: 1, S0444: 1, S0360: 1, H0431: 1, S0010: 1, H0052: 1, H0596: 1, H0687: 1,		

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			3453	Ser-48 to Leu-56, Ser-70 to Val-75, Thr-83 to Ala-92.			
			278 - 562				
		1278					
	HNOAR85R						
HNOAR85							

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HNOAS07	HNOAS07R	1279	84 - 521	3454	Asn-80 to Gly-86, Glu-133 to Arg-138.			
HNOAS36	HNOAS36R	1280	3 - 254	3455	Leu-1 to Thr-7, Pro-39 to Ser-48, Trp-62 to Thr-68.			
HNOAS92	HNOAS92R	1281	2 - 385	3456	Pro-28 to Tyr-37, Leu-52 to Trp-57, Lys-109 to Leu-114.	H0457: 4, H0441: 3, H0393: 2, H0052: 2, H0620: 2, S0144: 2, H0521: 2, H0341: 1, S0358: 1, H0587: 1, H0632: 1, H0581: 1, H0309: 1, L0471: 1, H0622: 1, H0424: 1, H0213: 1, S0366: 1, H0163: 1, H0132: 1, S0142: 1, H0529: 1, H0547: 1, H0651: 1,		

HNOAT40	HNOAT40R	1282	96 - 317	3457		S3014: 1, L0748: 1, L0777: 1 and L0599: 1.		
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HNOAT76	HNOAT76R	1283	2 - 187	3458				
HNOAV91	HNOAV91R	1284	2 - 439	3459	Lys-28 to Tyr-49, Arg-75 to Ala-83, Thr-90 to Ala-95, Arg-107 to Asp-114, Arg-137 to Ser-146.			
HNOBD17	HNOBD17R	1285	98 - 316	3460				
HNOBE83	HNOBE83R	1286	2 - 607	3461	Arg-1 to Gly-6, Lys-21 to Gly-29, Gln-51 to Gly-56, Pro-82 to Asp-90, Lys-175 to Ser-180.	L0747: 16, H0651: 10, H0561: 9, L0758: 8, H0046: 7, L0663: 7, S0026: 7, H0656: 6, H0393: 6, H0494: 6, L0774: 6, L0659: 6, L0665: 6, L0750: 6, L0731: 6, L0596: 6, H0543: 6, H0341: 5, H0575: 5, H0529: 5, L0662: 5, L0655: 5, H0539: 5, L0439: 5, L0752: 5, S0114: 4, H0657: 4, H0351: 4, H0581: 4, H0551: 4, H0560: 4, S0372: 4, L0769: 4, L0764: 4, L0776: 4, H0144: 4, H0660: 4, H0648: 4, H0672: 4, S0028: 4, L0749: 4, L0362: 4, H0580: 3, H0497: 3, H0486: 3, H0318: 3,		

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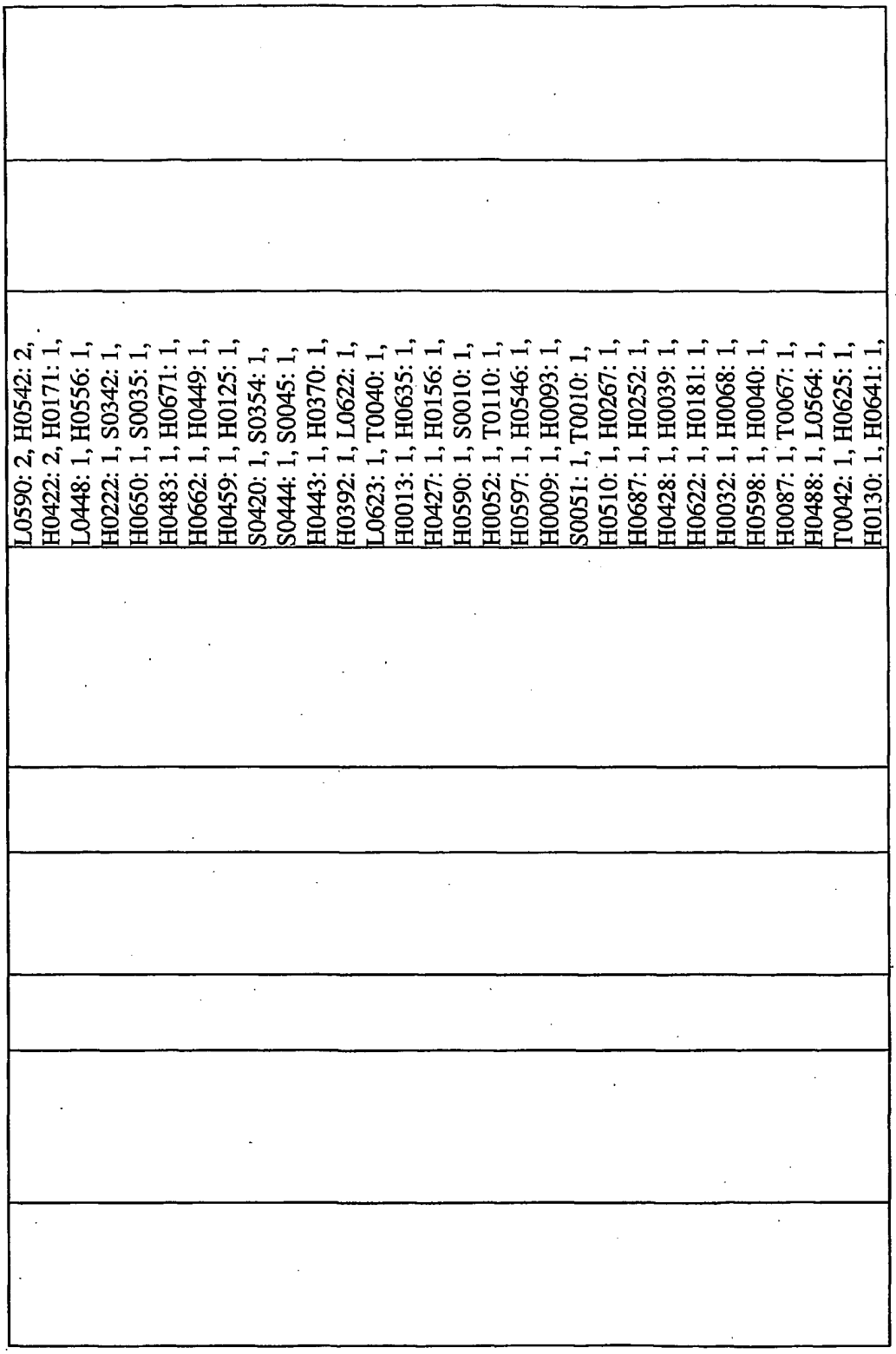
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HNOBV55	HNOBV55RA	1287	111 - 506	3462	Pro-14 to Gly-22, Ile-31 to Ala-36, Lys-53 to Ile-65.	H0633: 1, S0208: 1, S0422: 1, S0426: 1, L0520: 1, L0762: 1, L0770: 1, L0796: 1, L0630: 1, L0646: 1, L0773: 1, L0766: 1, L0381: 1, L0388: 1, L0804: 1, L0650: 1, L0375: 1, L0651: 1, L0784: 1, L0656: 1, L0518: 1, L0519: 1, L0530: 1, L0368: 1, S0053: 1, S0374: 1, H0547: 1, H0689: 1, H0682: 1, H0684: 1, H0670: 1, H0518: 1, S0013: 1, H0704: 1, S0044: 1, H0214: 1, S0404: 1, S0406: 1, H0555: 1, H0576: 1, S0392: 1, L0751: 1, S0031: 1, H0444: 1, S0106: 1, S0011: 1, H0667: 1, S0192: 1, S0242: 1, S0276: 1, L0697: 1 and L0360: 1.			
HNOCE63	HNOCE63R	1288	2 - 394	3463	Val-2 to Leu-20.				

HNOCL43	HNOCL43R	1289	2 - 193	3464				
HNOCN02	HNOCN02R	1290	1 - 624	3465				
HNOCN10	HNOCN10R	1291	1 - 453	3466		H0556: 11, H0265: 9, H0012: 4, H0616: 4, H0393: 3, H0620: 3, L0163: 3, H0135: 3, S0002: 3, H0651: 3, L0596: 3, H0542: 3, H0543: 3, S0418: 2, S0045: 2, H0266: 2, S0150: 2, H0521: 2, L0591: 2, S0040: 1, H0341: 1, H0663: 1, S0354: 1, S0358: 1, S0046: 1, S0222: 1, H0586: 1, H0486: 1, H0635: 1, H0618: 1, H0581: 1, S0049: 1, H0263: 1, T0110: 1, H0009: 1, T0003: 1, H0373: 1, S0051: 1, S0336: 1, H0290: 1, H0286: 1, H0328: 1, H0622: 1, H0553: 1, H0124: 1, H0090: 1, S0038: 1, H0100: 1, T0042: 1, S0015: 1, H0560: 1, H0509: 1, H0130: 1, L0654: 1, H0144: 1,			

HNOCR44	HNOCR44R	1292	3 - 581	3467	Pro-1 to Lys-10, Phe-31 to Asn-37, Gln-42 to Leu-50, Arg-58 to Gln-65, Leu-86 to Ala-91, Tyr-101 to Ala-111.	L0438: 1, H0547: 1, H0519: 1, H0593: 1, H0435: 1, L0602: 1, S0332: 1, H0522: 1, H0134: 1, S3014: 1, L0439: 1, H0445: 1, S0434: 1, L0485: 1, L0604: 1, L0593: 1, L0594: 1, L0601: 1, H0422: 1 and S0398: 1.			
HNOCU03	HNOCU03R	1293	1 - 258	3468	Glu-1 to Asp-6.				
HNODD77	HNODD77R	1294	204 - 407	3469					
HNODG11	HNODG11R	1295	63 - 320	3470	Ser-47 to Ile-53.				
HNODM92	HNODM92R	1296	269 - 583	3471	Gly-35 to Glu-41.				
HNODP28	HNODP28R	1297	480 - 707	3472					
HNOJA93	HNOJA93R	1298	1 - 453	3473	Gly-13 to Lys-20, Ala-26 to Lys-32, Ala-83 to Leu-88, Gly-128 to Val-135, Phe-142 to Asn-151.				
HNOJB10	HNOJB10R	1299	2 - 391	3474		S0358: 7, L0750: 7, S0360: 6, H0617: 5, S0126: 4, H0545: 3,			

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HNOJB57	HNOJB57R	1300	2 - 355	3475	Arg-8 to Gln-18, Thr-24 to Gly-35, Lys-53 to Gly-61, Pro-77 to Cys-82, Pro-103 to Gln-117.	L0770: 1, L0769: 1, L0372: 1, L0764: 1, L0771: 1, L0773: 1, L0775: 1, L0375: 1, L0556: 1, L0655: 1, L0807: 1, L0656: 1, L0659: 1, L0540: 1, L0783: 1, L0384: 1, S0216: 1, H0144: 1, H0691: 1, H0690: 1, H0684: 1, H0658: 1, H0670: 1, H0672: 1, S0328: 1, S0378: 1, S0380: 1, H0518: 1, H0555: 1, S3014: 1, S0032: 1, L0741: 1, H0445: 1, L0596: 1, S0192: 1, S0194: 1, S0460: 1 and H0352: 1.		
HNOJD14	HNOJD14R	1301	2 - 439	3476				
HNOJF20	HNOJF20R	1302	10 - 165	3477	Leu-14 to Arg-20, Ser-29 to Ser-38, Pro-43 to Gly-52.			
HNOJG05	HNOJG05R	1303	288 - 572	3478	Ile-34 to Ala-40.			
HNOJH48	HNOJH48R	1304	2 - 283	3479	Arg-70 to Ser-78.	L0748: 17, L0749: 13,		

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HNOJH52	HNOJH52R	1305	3 - 200	3480					
HNOJI82	HNOJI82R	1306	1 - 489	3481	Lys-36 to Gln-48, Gln-56 to Ser-72, Gly-82 to Val-105, Lys-114 to Lys-120, Ser-122 to Cys-133.				
HNOJI85	HNOJI85R	1307	1 - 552	3482	Ala-1 to Ser-6.			L0754: 5, L0731: 4, L0748: 3, L0750: 3, H0411: 2, H0012: 2, H0687: 2, H0644: 2, L0803: 2, H0550: 1, L0021: 1, H0599: 1, L0022: 1, H0042: 1,	

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HNOJJ20	HNOJJ20R	1308	1 - 261	3483	Lys-19 to Asn-25, Pro-61 to Lys-66.			
HNOJJ26	HNOJJ26R	1309	2 - 385	3484				
HNOJK66	HNOJK66R	1310	1 - 462	3485	Ser-27 to Gly-38, Ser-63 to Trp-72, Trp-79 to Asn-84, Arg-133 to Trp-139.	L0588: 14, S0046: 13, S0045: 12, T0049: 7, H0599: 7, L0662: 7, L0599: 7, H0427: 6, T0048: 6, H0575: 5, L0747: 5, H0254: 4, H0618: 4, H0617: 4, H0124: 4, H0413: 4, H0052: 3, H0024: 3, H0553: 3, H0269: 3, H0412: 3, H0056: 3, H0623: 3, L0764: 3, L0659: 3, L0809: 3, L0666: 3, L0750: 3, L0758: 3, L0600: 3, S0001: 2, H0255: 2, H0661: 2, H0619: 2,		

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HNOJM64	HNOJM64R	1312	3 - 428	3487	Gly-105 to Glu-110, Ala-133 to Tyr-142.			
HNOJO55	HNOJO55R	1313	426 - 265	3488				
HNOJP42	HNOJP42R	1314	12 - 302	3489	Trp-42 to Glu-50.			
HNOJQ22	HNOJQ22R	1315	1 - 510	3490	Phe-164 to Leu-170.			
HNOKA20	HNOKA20R	1316	2 - 268	3491	Gln-30 to Gly-36, Lys-43 to Lys-54, Thr-73 to Ile-79.			
HNOKD74	HNOKD74R	1317	2 - 85	3492				
HNOKG34	HNOKG34R	1318	1 - 510	3493	Lys-17 to Leu-27, Thr-39 to Leu-44, Asp-62 to Gly-70, Arg-89 to Asp-94, Arg-102 to Gly-113, Lys-127 to Glu-132, Thr-152 to Arg-160.			
HNOKG69	HNOKG69R	1319	188 - 418	3494				
HNOKG71	HNOKG71R	1320	2 - 331	3495	Gly-8 to Ala-15, Leu-33 to His-50,			

HNOKH94	HNOKH94R	1321	214 - 411	3496	Phe-59 to Gly-64, Gly-70 to Gly-84.	Thr-20 to Asp-27, His-39 to Thr-44.	L0666: 11, S0358: 8, L0752: 8, L0749: 5, L0362: 5, L0771: 4, L0803: 4, L0528: 4, L0664: 4, L0740: 4, L0754: 4, L0599: 4, L0769: 3, L0662: 3, L0657: 3, L0659: 3, L0663: 3, L0748: 3, L0750: 3, L0757: 3, L0758: 3, H0171: 2, S0360: 2, H0574: 2, H0251: 2, L0483: 2, H0412: 2, H0509: 2, L0770: 2, L0774: 2, L0775: 2, L0665: 2, H0690: 2, S0330: 2, L0755: 2, L0731: 2, L0595: 2, H0624: 1, H0170: 1, H0685: 1, H0656: 1, H0663: 1, H0305: 1, H0589: 1, S0356: 1, S0354: 1, H0580: 1, S0132: 1, S0300: 1, L0717: 1, H0331: 1, H0013: 1, H0108: 1, L0105: 1, H0052: 1, H0546: 1,		

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HNOKI06	HNOKI06R	1322	3' - 419	3497	Asp-36 to Glu-46, Gln-52 to Ile-61, Leu-76 to Lys-87, Asn-100 to Val-108, Ser-120 to Gln-128.		

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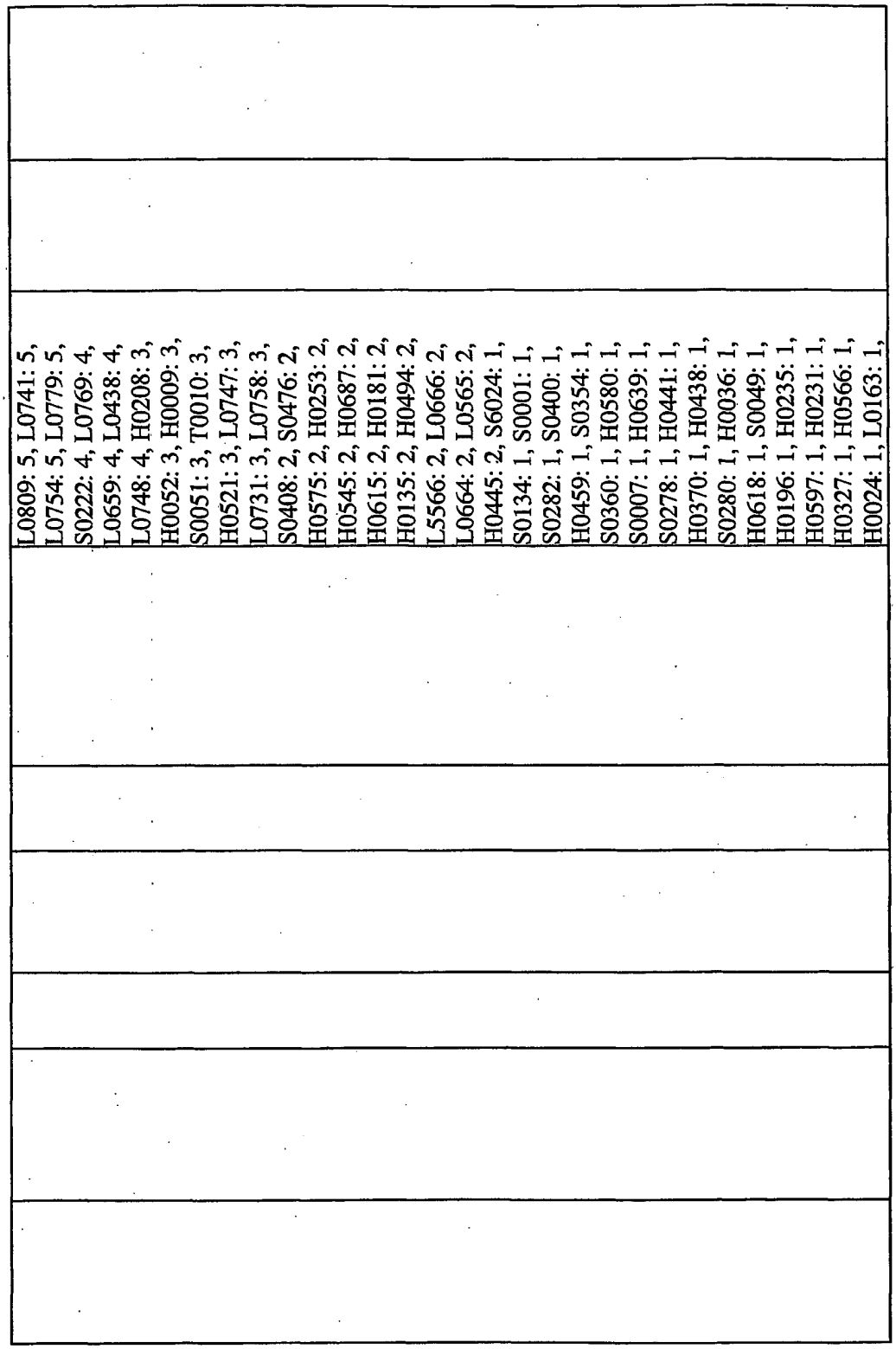
HNOKI89	HNOKI89R	1323	2 - 370	3498	Glu-1 to Pro-7, Asp-25 to Leu-31, Arg-54 to Lys-73.				
HNOKN33	HNOKN33R	1324	57 - 284	3499	Pro-7 to Gly-20.	L0751: 9, H0556: 8, H0617: 8, L0777: 6,			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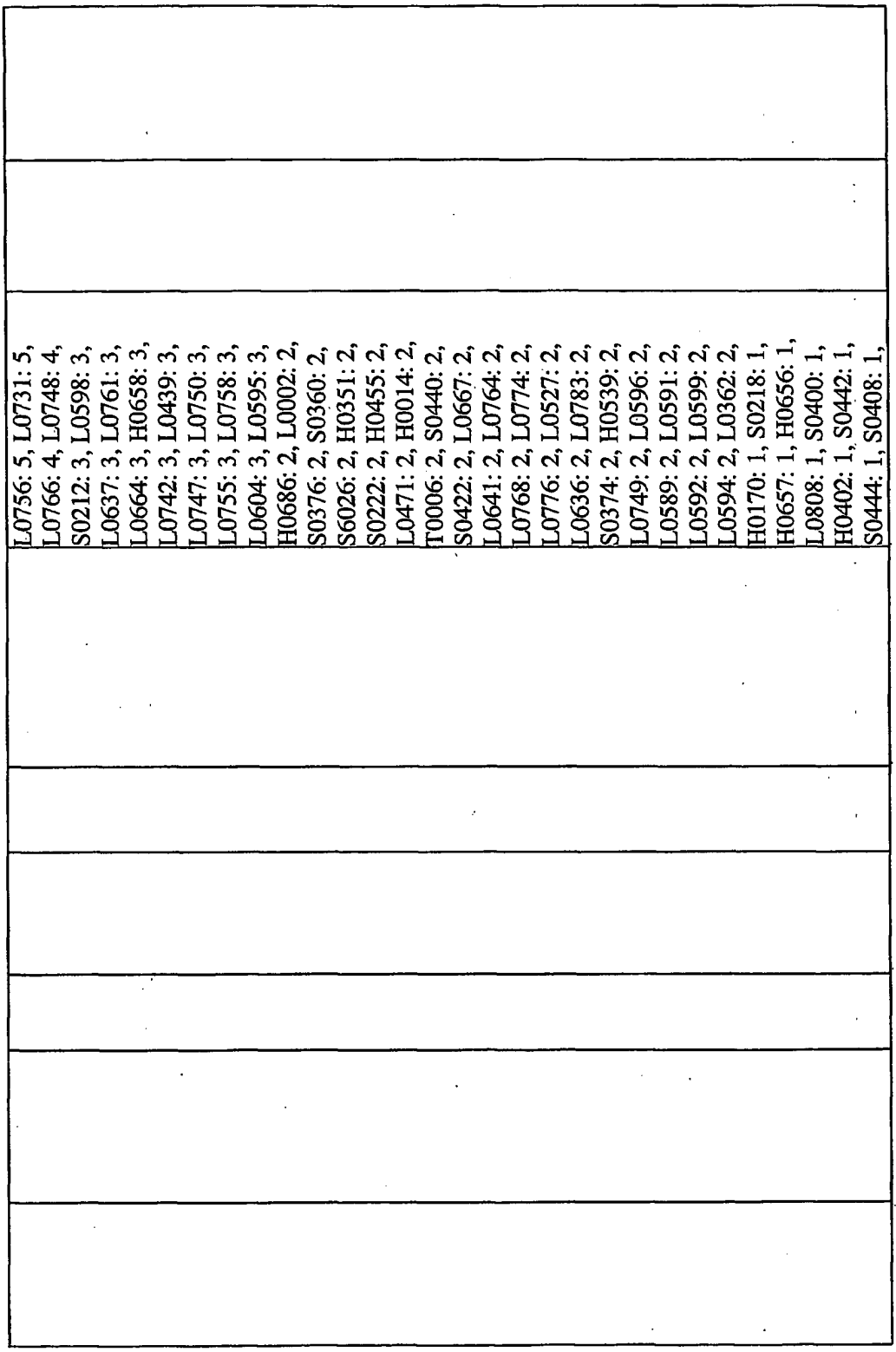
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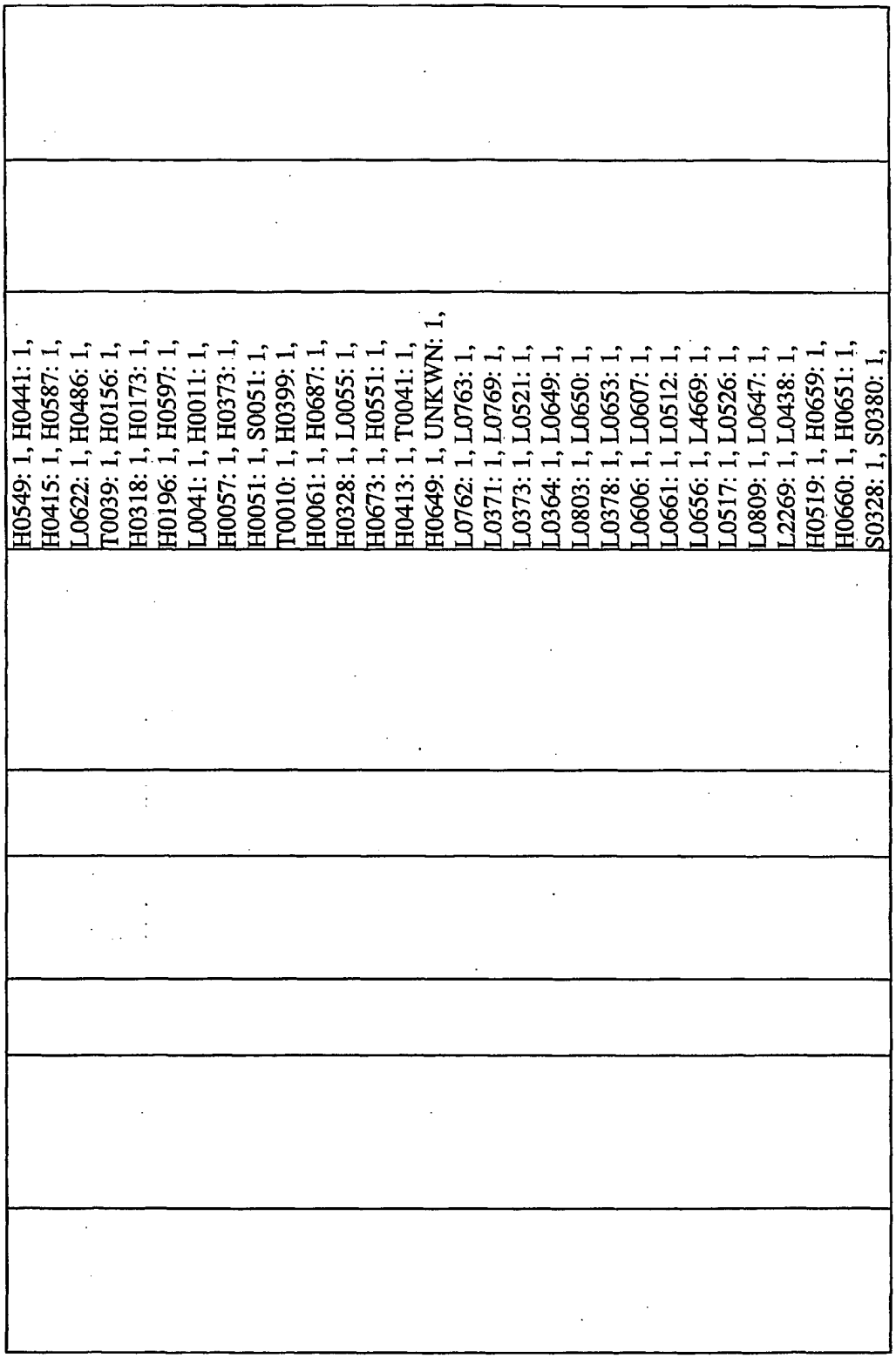
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HNOKU52	HNOKU52R	1327	3 - 509	3502	Lys-13 to Ser-41, Lys-57 to Lys-66, Lys-89 to Lys-97, Lys-113 to Ala-118, Pro-131 to Ala-147, Ala-159 to Ala-169.			
HNOKV82	HNOKV82R	1328	3 - 488	3503	Lys-24 to Lys-31, Gly-132 to Glu-137.			
HNOKZ03	HNOKZ03R	1329	216 - 401	3504		H0624: 10, S0192: 8, S0022: 7, S0212: 5, H0031: 4, H0412: 4, S0028: 4, L0747: 4, S0194: 4, H0717: 3, H0427: 3, L0471: 3, S0250: 3, H0039: 3,		

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HNORB68	HNORB68R	1331	1 - 210	3506	Gly-1 to Ser-22, Pro-29 to Lys-70.			
HNORC14	HNORC14R	1332	2 - 499	3507		S0412: 22, L0662: 19, L0777: 14, S0010: 11, S0222: 9, S6028: 9, L0750: 9, T0010: 8, L0659: 8, L0747: 8, L0756: 8, L0663: 7, L0439: 7, H0051: 6, L0518: 6, L0754: 6, L0752: 6, S0280: 5,		

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HNORD11	HNORD11R	1333	155 - 430	3508				
HNORE65	HNORE65R	1334	2 - 436	3509	Ala-24 to Lys-29, Lys-51 to Gly-62.	H0585: 20, H0641: 14, H0521: 9, H0141: 5, H0031: 5, H0422: 5, H0644: 4, L0755: 4, H0295: 3, H0638: 3, S0376: 3, H0544: 3, S0440: 3, H0689: 3, H0690: 3, L0757: 3, H0657: 2, S0360: 2, H0586: 2, H0581: 2, H0063: 2, S0144: 2, L0662: 2, H0691: 2, H0520: 2, S0126: 2, H0522: 2, L0740: 2, L0777: 2, H0423: 2, S0298: 1, H0306: 1, S0132: 1, S0278: 1, H0549: 1, S0222: 1,		

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HNORF03	HNORF03R	1335	37 - 387	3510	Pro-19 to His-36, Glu-68 to Ala-86.		

							L0608: 1.			
HNORF04	HNORF04R	1336	1 - 168	3511						
HNORF05	HNORF05R	1337	2 - 334	3512	Thr-2 to Phe-7, Gly-18 to Arg-23, Asp-27 to Glu-35.					
HNORF13	HNORF13R	1338	1 - 636	3513	Gly-1 to Thr-10.					
HNORH03	HNORH03R	1339	3 - 680	3514			S0358: 7, L0750: 7, S0360: 6, H0617: 5, S0126: 4, H0545: 3, L0776: 3, S0374: 3, L0748: 3, L0755: 3, L0588: 3, H0422: 3, H0685: 2, H0549: 2, H0550: 2, H0632: 2, H0546: 2, H0424: 2, H0163: 2, H0551: 2, L0665: 2, H0593: 2, H0660: 2, S0330: 2, L0747: 2, L0749: 2, L0777: 2, L0757: 2, S0031: 2, H0556: 1, H0686: 1, H0295: 1, S0430: 1, H0657: 1, H0341: 1, H0662: 1, S0278: 1, H0282: 1, H0592: 1, H0586: 1, H0486: 1, T0039: 1, T0109: 1, H0004: 1, H0581: 1, H0309: 1, H0596: 1, T0110: 1,			

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HNORH05	HNORH05R	1340	1 - 498	3515	Arg-13 to Arg-21, Asp-26 to Pro-35,			

					Glu-58 to Gly-65, Ser-74 to Pro-82, Gln-107 to Asp-115, Asp-128 to Asn-137, Gln-145 to Arg-154, Gln-161 to Ser-166.			
HNORH35	HNORH35R	1341	20 - 244	3516	Ala-19 to Ser-27, Ser-41 to Val-53.			
HNORJ08	HNORJ08R	1342	3 - 377	3517	Asn-95 to Leu-100.			
HNTRB70	HNTRB70R	1343	144 - 377	3518	Pro-3 to Ile-12, Asn-20 to Glu-25.			
HOCMA02	HOCMA02R A	1344	3 - 530	3519	Ile-121 to Val-129, Ala-136 to Glu-142.	L0742: 10, H0144: 6, H0265: 5, S0116: 4, S0046: 4, S0222: 4, H0556: 3, H0250: 3, H0052: 3, S0027: 3, L0595: 3, S0212: 2, H0306: 2, S0358: 2, H0013: 2, H0618: 2, H0124: 2, H0100: 2, S0053: 2, H0660: 2, S0330: 2, S3012: 2, L0748: 2, L0439: 2, L0745: 2, L0757: 2, H0445: 2, S0342: 1, H0484: 1, H0638: 1, S0007: 1, H0393: 1, H0437: 1, H0549: 1, H0438: 1, H0486: 1,		

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HOCMB45	HOCMB45RA	1345	347 - 541	3520	Asn-39 to Gln-44, Leu-47 to Asp-55.	L0439: 17, L0438: 6, H0424: 5, S0007: 4, L0769: 4, H0213: 3,		

						L0776: 3, H0660: 3, H0309: 2, S0051: 2, L0789: 2, L0663: 2, L0750: 2, L0757: 2, L0759: 2, S0196: 2, S0040: 1, S0001: 1, H0662: 1, H0402: 1, L0005: 1, S0356: 1, H0052: 1, H0596: 1, H0009: 1, T0010: 1, L0483: 1, T0006: 1, H0033: 1, H0031: 1, H0169: 1, H0634: 1, H0538: 1, L0638: 1, L0643: 1, L0764: 1, L0768: 1, L0803: 1, L0804: 1, L0375: 1, L0606: 1, L0659: 1, L0791: 1, L0352: 1, H0547: 1, L0602: 1, H0436: 1, L0742: 1, L0749: 1, L0777: 1, L0752: 1, L0731: 1, L0758: 1, S0394: 1, L0596: 1 and S0412: 1.		
HOCMB65	HOCMB65RA	1346	241 - 456	3521					
HOCMC08	HOCMC08R	1347	1 - 426	3522	Lys-18 to Tyr-31, Ile-45 to Asp-50, Trp-78 to Ser-88,				

					Pro-102 to Pro-109.			
HOCMF06	HOCMF06R	1348	382 - 588	3523				
HOCMF27	HOCMF27R	1349	3 - 395	3524	Glu-1 to Ile-6, Asp-125 to Pro-131.	L0748: 26, H0046: 18, H0510: 7, H0673: 7, L0803: 7, H0169: 6, H0144: 6, L0731: 4, H0574: 3, H0521: 3, H0370: 2, H0615: 2, H0032: 2, T0067: 2, H0509: 2, S0210: 2, L0776: 2, L0749: 2, L0750: 2, L0595: 2, H0170: 1, H0656: 1, H0341: 1, H0151: 1, S0046: 1, S0132: 1, H0619: 1, H0351: 1, S0222: 1, H0497: 1, H0632: 1, H0486: 1, H0156: 1, H0575: 1, H0052: 1, H0596: 1, H0057: 1, H0014: 1, H0355: 1, H0286: 1, H0622: 1, H0165: 1, H0674: 1, H0212: 1, H0038: 1, H0379: 1, H0059: 1, T0041: 1, S0448: 1, H0132: 1, S0150: 1, L0646: 1, L0774: 1, L0527: 1, L0657: 1, L0809: 1,		

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HOCMF50	HOCMF50RB	1350	49 - 354	3525	Gly-2 to Lys-9, Arg-21 to Glu-32, Pro-58 to Lys-64, Thr-73 to Glu-83.	H0687: 1, L0663: 1 and H0660: 1.		
HOCMF54	HOCMF54R	1351	37 - 285	3526	Lys-1 to Thr-6, Ala-26 to Gly-36, Ser-47 to Gln-55, Leu-72 to Cys-83.	L0794: 7, L0666: 4, L0750: 3, L0664: 2, L0665: 2, H0670: 2, H0660: 2, L0439: 2, L0751: 2, L0756: 2, H0650: 1, H0150: 1, L0769: 1, L0803: 1, L0378: 1, L0657: 1, H0684: 1 and H0555: 1.		
HOCMG37	HOCMG37R	1352	1 - 456	3527	Gly-1 to Asn-9, Glu-31 to Val-39.	H0657: 13, S0360: 12, S0026: 7, H0547: 6, H0171: 4, S0356: 4, H0551: 4, H0560: 4, H0509: 4, H0689: 4, H0543: 4, S0358: 3,		

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HOCMI62	HOCMI62R	1353	49 - 348	3528		H0553: 1, H0068: 1, H0090: 1, H0040: 1, H0634: 1, T0067: 1, H0079: 1, H0561: 1, L0065: 1, H0130: 1, H0647: 1, S0422: 1, L0772: 1, L0648: 1, L0662: 1, L0768: 1, L0375: 1, L0657: 1, L0659: 1, L0518: 1, S0310: 1, L0438: 1, H0670: 1, H0648: 1, S0380: 1, H0521: 1, H0436: 1, L0439: 1, L0749: 1, L0756: 1, L0779: 1, L0731: 1, H0343: 1, L0596: 1, L0588: 1, L0590: 1, L0591: 1, L0603: 1, H0653: 1, S0196: 1, H0422: 1, S0424: 1, S0384: 1 and H0506: 1.			
HOCMJ47	HOCMJ47R	1354	1 - 510	3529	Lys-23 to Ser-29, Tyr-55 to His-62, Tyr-65 to Leu-71.				
HOCMK20	HOCMK20R	1355	14 - 400	3530	Glu-32 to Ser-38.				
HOCML06	HOCML06R	1356	3 - 707	3531	Gly-1 to Arg-9.				
HOCML66	HOCML66R	1357	2 - 289	3532		L0748: 2, S6028: 1, H0682: 1, H0660: 1,			

HOCMM52	HOCMM52R	1358	130 - 594	3533	Thr-19 to Cys-25, Lys-133 to Ala-138.	S0378: 1 and H0506: 1.				
HOCMO50	HOCMO50R	1359	3 - 425	3534						
HOCMS75	HOCMS75R	1360	3 - 500	3535		H0295: 8, H0617: 7, L0665: 7, H0435: 7, H0592: 6, H0494: 6, L0439: 6, L0751: 6, S0360: 5, S0046: 4, H0587: 4, H0012: 4, H0264: 4, L0662: 4, S0406: 4, H0586: 3, H0620: 3, H0031: 3, H0551: 3, S0440: 3, S0002: 3, L0763: 3, L0648: 3, L0649: 3, L0774: 3, L0659: 3, H0520: 3, H0547: 3, H0689: 3, H0660: 3, S0328: 3, S0330: 3, L0748: 3, L0754: 3, L0750: 3, H0294: 2, H0650: 2, H0341: 2, S0356: 2, S0132: 2, H0370: 2, H0333: 2, H0643: 2, L0623: 2, H0706: 2, H0081: 2, H0039: 2, H0553: 2, H0181: 2, H0068: 2, H0135: 2, H0040: 2,				

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				3536	Pro-84 to Pro-91.		
				145 - 636			
			1361				
		HOCMS87R					
	HOCMS87						

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HOCMX29	HOCMX29R	1362	86 - 235	3537				
HOCMY53	HOCMY53R	1363	76 - 354	3538	Glu-1 to Gly-6, Leu-27 to Val-40, Glu-60 to Asn-67.			
HOCMY61	HOCMY61R	1364	2 - 466	3539				
HOCMY79	HOCMY79R	1365	314 - 511	3540	Gly-17 to Arg-42, Phe-56 to Ser-66.			
HOCOC38	HOCOC38R	1366	394 - 2	3541				
HOCOC41	HOCOC41R	1367	520 - 789	3542	Lys-1 to His-6.			
HOCOC94	HOCOC94R	1368	3 - 488	3543	Lys-7 to Glu-13, Gly-39 to Thr-44, Gly-82 to Ile-89, Glu-98 to Asn-105.	L0777: 14, L0731: 10, L0740: 8, L0439: 7, L0754: 6, S0222: 5, H0144: 5, L0745: 5,		

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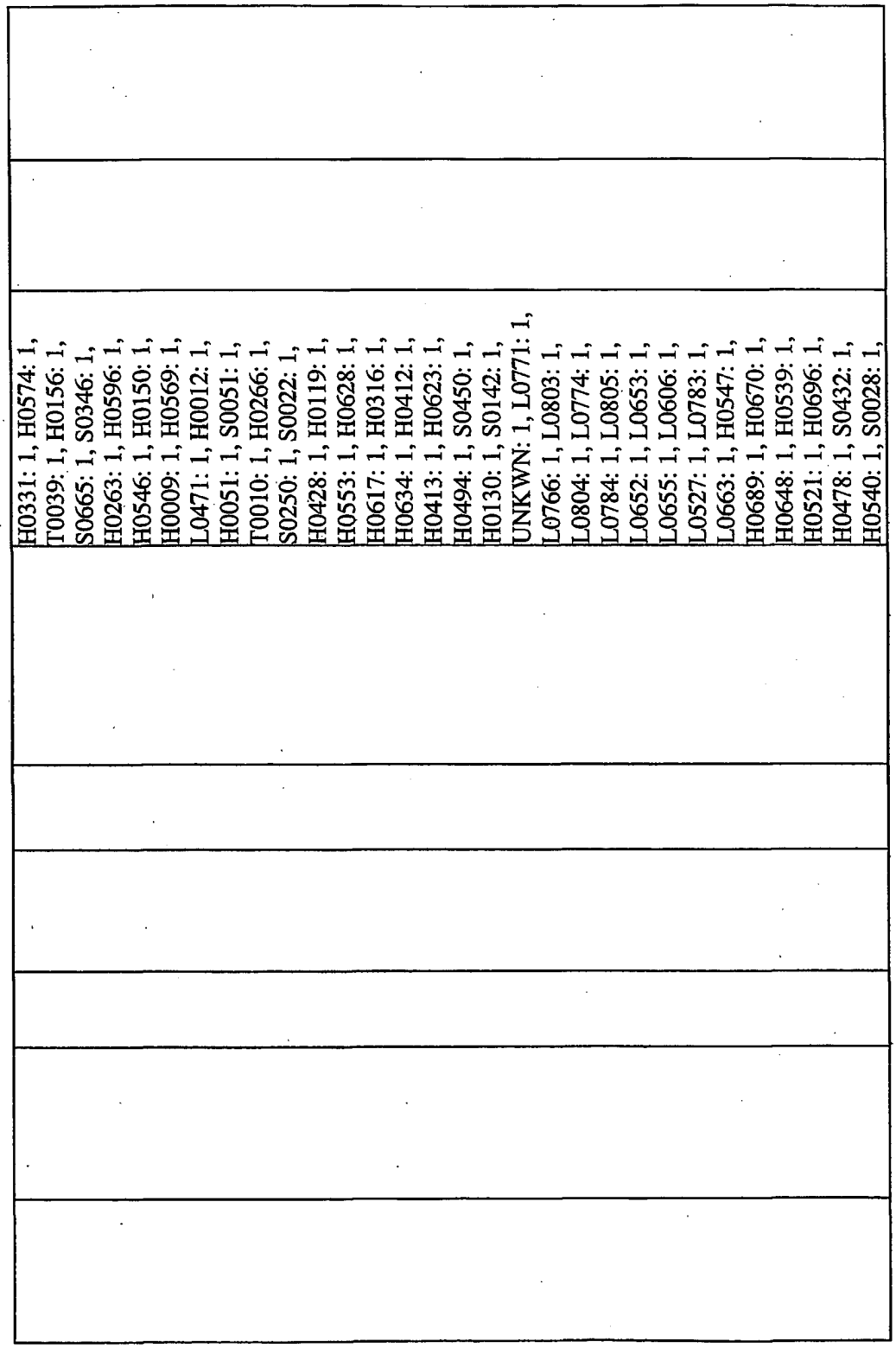
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HOCOF35	HOCOF35R	1369	221 - 502	3544	Pro-6 to Arg-12, Gln-17 to Leu-22, His-25 to Asp-32, Gly-62 to Lys-69.				
HOCOF50	HOCOF50R	1370	2 - 409	3545	Thr-16 to Phe-28, Cys-58 to Ser-69, Glu-91 to Glu-99, Lys-113 to Gln-119.				
HOCOO62	HOCOO62R	1371	9 - 539	3546	Gln-37 to Trp-44, Arg-47 to Phe-57, Phe-67 to Ala-83, Pro-94 to Gly-99, Lys-109 to Cys-116, Arg-130 to Ser-137.				
HOCOP52	HOCOP52R	1372	2 - 382	3547					
HOCOQ13	HOCOQ13R	1373	46 - 492	3548	Glu-1 to Val-9.		H0521: 5, S0040: 3, H0039: 3, H0657: 2, H0341: 2, H0553: 2, S0210: 2, H0593: 2, H0445: 2, L0596: 2, S0212: 1, H0661: 1, S0418: 1, S0354: 1, S0358: 1, H0592: 1, T0039: 1, H0635: 1,		

HOCOQ93	HOCOQ93R	1374	448 - 639	3549		H0427: 1, H0544: 1, H0546: 1, H0545: 1, H0046: 1, L0471: 1, H0083: 1, S6028: 1, S0338: 1, S0003: 1, H0068: 1, H0038: 1, H0063: 1, H0551: 1, H0100: 1, T0042: 1, H0494: 1, H0561: 1, H0646: 1, L0800: 1, L0649: 1, L0654: 1, L0666: 1, H0660: 1, H0518: 1, S0152: 1, S0146: 1, H0555: 1, S0037: 1, S0028: 1, L0605: 1, L0599: 1, L0603: 1, H0667: 1, H0542: 1, H0543: 1, S0424: 1 and H0506: 1.			
HOCOT70	HOCOT70R	1375	2 - 412	3550					
HOCOV29	HOCOV29R	1376	107 - 268	3551	Lys-9 to Asp-16, Thr-27 to Trp-36.				
HOCPF69	HOCPF69R	1377	1 - 573	3552					
HOCPG38	HOCPG38R	1378	1 - 183	3553	Pro-38 to Gln-43.	H0046: 5, H0144: 5, L0665: 4, L0662: 3, L0766: 3, L0750: 3, L0779: 3, L0759: 3, H0170: 2, S0376: 2, H0329: 2, H0427: 2,			

		L0770: 2, L0529: 2, L0439: 2, L0740: 2, L0751: 2, L0758: 2, S0242: 2, H0223: 1, H0685: 1, S0116: 1, S0282: 1, H0662: 1, S6022: 1, H0574: 1, H0486: 1, H0013: 1, H0098: 1, H0575: 1, H0581: 1, H0052: 1, L0471: 1, H0024: 1, H0510: 1, H0594: 1, H0328: 1, H0169: 1, H0598: 1, H0163: 1, H0646: 1, L0637: 1, L0768: 1, L0794: 1, L0804: 1, L0775: 1, L0653: 1, L0659: 1, L0526: 1, L0783: 1, L0809: 1, L0544: 1, L0647: 1, L0666: 1, L0664: 1, S0374: 1, L0438: 1, H0519: 1, H0670: 1, H0660: 1, H0648: 1, S0378: 1, H0696: 1, S0432: 1, L0777: 1, L0755: 1, S0308: 1, L0591: 1, L0608: 1, S0192: 1, S0194: 1, H0543: 1,				

							H0423: 1 and S0412: 1.		
HOCPG48	HOCPG48R	1379	39 - 185	3554					
HOCPH40	HOCPH40R	1380	2 - 217	3555	Leu-9 to Val-14, Glu-41 to Ala-49.		L0731: 7, S0358: 6, L0439: 6, L0769: 5, L0809: 4, L0747: 4, S0354: 3, H0580: 3, H0438: 3, H0581: 3, L0770: 3, L0766: 3, L0774: 3, L0775: 3, L0740: 3, L0749: 3, L0758: 3, L0596: 3, H0677: 3, H0392: 2, H0457: 2, L0471: 2, H0510: 2, H0169: 2, H0551: 2, T0042: 2, H0494: 2, S0438: 2, L0761: 2, L0657: 2, L0783: 2, L0647: 2, L0666: 2, L0565: 2, L0438: 2, H0521: 2, L0748: 2, L0750: 2, L0779: 2, L0752: 2, L0759: 2, L0588: 2, L0605: 2, L0592: 2, L0581: 2, L0615: 1, S0116: 1, H0638: 1, S0418: 1, S0444: 1, S0360: 1, S0222: 1, H0586: 1, H0427: 1, H0618: 1, H0390: 1,		

HOCPH44	HOCPH44R	1381	3 - 281	3556	Gly-18 to Asp-23, Gln-34 to Gly-40, Asp-81 to Lys-87.	H0318: 1, H0007: 1, H0052: 1, H0544: 1, H0024: 1, H0014: 1, H0083: 1, H0375: 1, S6028: 1, H0266: 1, H0398: 1, L0055: 1, H0135: 1, H0087: 1, S0344: 1, S0426: 1, H0529: 1, L0763: 1, L0639: 1, L0374: 1, L0764: 1, L0662: 1, L0768: 1, L0803: 1, L0378: 1, L0776: 1, L0659: 1, L0518: 1, L0663: 1, L0665: 1, S0374: 1, H0547: 1, H0519: 1, H0593: 1, H0690: 1, H0682: 1, H0660: 1, S0328: 1, H0539: 1, H0555: 1, L0743: 1, L0777: 1, H0445: 1, L0362: 1, S0242: 1 and H0543: 1.			
HOCPI28	HOCPI28R	1382	3 - 245	3557					
HOCPI53	HOCPI53R	1383	2 - 232	3558	Asp-43 to Gly-48.				
HOCPL59	HOCPL59R	1384	285 - 530	3559					
HOCPM39	HOCPM39R	1385	2 - 136	3560					

HOCPP65	HOCPP65R	1386	3 - 275	3561	Ala-2 to Ala-9.	L0747: 10, L0805: 6, S0358: 4, L0775: 4, L0655: 4, L0749: 4, H0656: 3, S0440: 3, L0803: 3, L0776: 3, L0789: 3, H0650: 2, H0662: 2, L0471: 2, H0620: 2, H0169: 2, H0616: 2, L0770: 2, L0769: 2, L0761: 2, L0800: 2, L0794: 2, L0804: 2, L0806: 2, L0657: 2, L0809: 2, L0665: 2, H0547: 2, S0126: 2, H0660: 2, H0648: 2, H0521: 2, S0406: 2, L0748: 2, L0750: 2, L0758: 2, L0581: 2, T0002: 1, H0686: 1, H0657: 1, S0418: 1, S0420: 1, S0356: 1, S0442: 1, S0444: 1, H0574: 1, H0559: 1, H0486: 1, L0586: 1, T0114: 1, H0250: 1, H0318: 1, H0014: 1, H0051: 1, H0266: 1, H0292: 1, H0428: 1, H0031: 1, H0673: 1, H0163: 1,		

						H0591: 1, H0494: 1, L0640: 1, L0763: 1, L0772: 1, L0773: 1, L0521: 1, L0766: 1, L0774: 1, L0375: 1, L0384: 1, L0793: 1, H0144: 1, H0703: 1, S0374: 1, H0593: 1, H0690: 1, H0659: 1, H0658: 1, S0328: 1, S0152: 1, L0744: 1, L0779: 1, L0752: 1, L0755: 1, L0731: 1, L0759: 1, S0026: 1, H0136: 1, H0542: 1 and H0422: 1.		
HOCPP80	HOCPP80R	1387	3 - 587	3562	Glu-16 to Lys-21, Asn-62 to Arg-68, Asp-94 to Thr-102, Gly-161 to Leu-170.			
HOCPQ24	HOCPQ24R	1388	26 - 358	3563				
HOCPQ59	HOCPQ59R	1389	2 - 394	3564	Ser-9 to Glu-16, Phe-49 to Tyr-58, Asn-102 to Gly-110.	L0754: 4, H0290: 2, L0761: 2, L0794: 2, L0766: 2, L0793: 2, L0731: 2, L0758: 2, L0759: 2, L0594: 2, H0713: 1, H0402: 1, S0418: 1, S0354: 1, H0580: 1, L0717: 1, H0550: 1, H0333: 1,		

HOCPQ66	HOCPQ66R	1390	2 - 427	3565	Asp-24 to Leu-31, Ile-123 to Gln-128.	H0643: 1, H0574: 1, S0280: 1, H0618: 1, H0052: 1, H0546: 1, H0545: 1, H0014: 1, H0033: 1, H0100: 1, L5566: 1, L0773: 1, L0521: 1, L0803: 1, L0804: 1, L0807: 1, L0788: 1, H0670: 1, H0660: 1, H0521: 1, S0404: 1, S0406: 1, H0436: 1, L0779: 1, H0543: 1 and H0352: 1.		
HOCPQ75	HOCPQ75R	1391	2 - 487	3566				
HOCPR01	HOCPR01R	1392	3 - 536	3567	Ser-11 to Trp-18, Glu-43 to Leu-50, Phe-99 to Arg-120, Ser-136 to Tyr-144, Glu-154 to Cys-163.			
HOCPR29	HOCPR29R	1393	1 - 588	3568	Gln-14 to Lys-19, Glu-79 to Gly-87.	L0748: 9, H0556: 8, L0769: 5, L0766: 4, L0776: 4, H0547: 4, H0521: 4, L0750: 4, L0752: 4, L0758: 4, S0434: 4, H0542: 4, H0657: 3, S0418: 3, H0586: 3, H0587: 3, H0013: 3, H0052: 3,		

H0083: 3, H0038: 3, H0634: 3, H0494: 3, S0440: 3, L0774: 3, L0775: 3, L0659: 3, H0522: 3, L0744: 3, L0749: 3, L0755: 3, L0759: 3, H0543: 3, S0358: 2, S0476: 2, H0156: 2, H0194: 2, L0471: 2, H0014: 2, H0201: 2, S0003: 2, T0023: 2, H0135: 2, H0551: 2, S0142: 2, L0372: 2, L0662: 2, L0767: 2, L0381: 2, L0383: 2, L0666: 2, L0665: 2, H0658: 2, H0660: 2, S0044: 2, S3014: 2, L0751: 2, L0754: 2, L0596: 2, L0588: 2, L0591: 2, L0592: 2, L0595: 2, L0601: 2, H0423: 2, S0040: 1, S0134: 1, S0298: 1, H0661: 1, H0664: 1, H0125: 1, S0420: 1, S0356: 1, S0354: 1, S0444: 1, S0360: 1, H0619: 1, H0393: 1, H0549: 1,							

H0550: 1, S0222: 1, S6014: 1, H0431: 1, H0592: 1, H0574: 1, T0039: 1, T0114: 1, H0075: 1, H0427: 1, H0590: 1, H0004: 1, H0318: 1, H0581: 1, H0251: 1, H0596: 1, T0115: 1, H0009: 1, H0081: 1, H0050: 1, H0024: 1, T0010: 1, H0687: 1, H0288: 1, H0290: 1, H0039: 1, H0622: 1, L0055: 1, H0032: 1, H0090: 1, H0591: 1, H0040: 1, H0063: 1, H0413: 1, T0069: 1, S0438: 1, H0538: 1, S0210: 1, S0426: 1, H0529: 1, L0520: 1, L0762: 1, L0763: 1, L0770: 1, L0374: 1, L0764: 1, L0768: 1, L0386: 1, L0803: 1, L0524: 1, L0806: 1, L0379: 1, L0527: 1, L0657: 1, L0382: 1, L0809: 1, L0788: 1, L0663: 1, S0052: 1, S0374: 1,						

							H0691: 1, H0682: 1, H0435: 1, H0659: 1, S0328: 1, S0330: 1, S0152: 1, H0436: 1, L0611: 1, S0027: 1, S0028: 1, L0747: 1, L0779: 1, L0780: 1, L0731: 1, L0608: 1, S0026: 1, H0653: 1, S0192: 1, S0194: 1, H0422: 1 and S0384: 1.		
HOCPR33	HOCPR33R	1394	168 - 335	3569					
HOCPR53	HOCPR53R	1395	62 - 256	3570	Glu-22 to Glu-30, Lys-42 to Glu-51.				
HOCPR55	HOCPR55R	1396	3 - 440	3571	Pro-7 to Ser-36, Cys-49 to Pro-57, Pro-85 to Ala-91, Gly-97 to Pro-109.		L0766: 2, H0660: 2, L0748: 2, L0740: 2, H0328: 1, L0769: 1, L0651: 1, L0653: 1, H0593: 1 and S0126: 1.		
HOCPR77	HOCPR77R	1397	1 - 279	3572					
HOCPR82	HOCPR82R	1398	1 - 102	3573					
HOCPS35	HOCPS35R	1399	3 - 203	3574	Tyr-1 to Gly-39, Ala-41 to Tyr-67.				
HOCPU03	HOCPU03R	1400	1 - 225	3575					
HOCPU30	HOCPU30R	1401	333 - 560	3576					
HOCPU68	HOCPU68R	1402	3 - 269	3577	Ser-49 to Asp-56; Arg-64 to Ile-71, Pro-80 to Ile-89.				
HOCPV29	HOCPV29R	1403	339 - 599	3578	His-10 to Asp-20,		H0620: 2, S0022: 2,		

					Asn-27 to Gly-33.	L0438: 2, T0002: 1, H0393: 1, H0370: 1, H0050: 1, H0373: 1, H0051: 1, H0028: 1, S0036: 1, H0551: 1, H0059: 1, S0150: 1, L0662: 1, S0126: 1, H0435: 1, H0660: 1, S0044: 1 and H0694: 1.	
HOCPV67	HOCPV67R	1404	1 - 390	3579		L0803: 7, L0439: 5, L0809: 4, L0749: 4, L0776: 3, H0520: 3, L0748: 3, L0750: 3, H0543: 3, S0440: 2, L0794: 2, L0804: 2, L0438: 2, H0547: 2, H0660: 2, S0406: 2, L0743: 2, L0777: 2, L0759: 2, H0556: 1, H0656: 1, S0358: 1, S0360: 1, H0637: 1, H0580: 1, H0741: 1, H0733: 1, H0619: 1, H0415: 1, H0600: 1, H0587: 1, H0486: 1, H0013: 1, H0427: 1, S0474: 1, H0581: 1, H0263: 1, H0457: 1, H0615: 1, H0428: 1, H0644: 1, H0032: 1,	

						S0036: 1, H0591: 1, H0634: 1, H0264: 1, S0438: 1, S0422: 1, S0002: 1, L0520: 1, L0766: 1, L0649: 1, L0650: 1, L0774: 1, L0775: 1, L0655: 1, L0790: 1, L0666: 1, L0663: 1, H0723: 1, H0593: 1, H0682: 1, H0670: 1, H0521: 1, S0013: 1, H0631: 1, S0206: 1, L0756: 1, L0731: 1, L0608: 1, S0194: 1 and S0424: 1.		
HOCPV72	HOCPV72R	1405	3 - 209	3580					
HOCPW56	HOCPW56R	1406	2 - 502	3581	Ile-53 to Trp-63, Ala-80 to Gly-89, Arg-134 to Gln-139.	L0752: 19, L0747: 12, L0776: 6, L0750: 5, L0608: 5, L0774: 4, L0805: 4, L0438: 4, L0740: 4, S0210: 3, L0600: 3, S0358: 2, S0222: 2, H0068: 2, H0040: 2, H0413: 2, L0770: 2, L0769: 2, L0772: 2, L0794: 2, L0783: 2, L0809: 2, S0328: 2, L0439: 2, L0745: 2, L0755: 2, L0758: 2, L0590: 2,			

H0170: 1, H0341: 1, H0483: 1, S0420: 1, S0410: 1, S0300: 1, H0411: 1, H0549: 1, L0622: 1, H0013: 1, H0156: 1, S0010: 1, H0052: 1, H0545: 1, N0006: 1, L0471: 1, H0012: 1, S0336: 1, H0428: 1, T0006: 1, H0606: 1, H0674: 1, L0455: 1, S0036: 1, H0038: 1, H0063: 1, H0494: 1, H0560: 1, L0520: 1, L0762: 1, L0521: 1, L0662: 1, L0767: 1, L0803: 1, L0653: 1, L0659: 1, L0790: 1, L0791: 1, L0666: 1, H0144: 1, S0374: 1, H0689: 1, H0690: 1, H0659: 1, H0660: 1, H0648: 1, S0378: 1, H0134: 1, H0214: 1, L0749: 1, L0731: 1, L0361: 1, S0106: 1, S0011: 1, H0653: 1, S0192: 1, S0242: 1, S0194: 1 and H0422: 1.						

HOCPW68	HOCPW68R	1407	1 - 297	3582					
HOCPW81	HOCPW81R	1408	2 - 694	3583	Pro-42 to Ser-59, Asp-159 to Asn-168, Tyr-196 to Gly-205.	H0046: 9, L0777: 3, S0376: 2, H0050: 2, S0344: 2, S0126: 2, H0670: 2, S0152: 2, H0521: 2, H0542: 2, H0543: 2, H0341: 1, S0354: 1, S0358: 1, S0408: 1, H0619: 1, H0393: 1, H0592: 1, H0590: 1, S0474: 1, H0546: 1, H0551: 1, H0494: 1, S0440: 1, L0663: 1, H0660: 1, H0672: 1, H0631: 1, S0028: 1, L0757: 1, S0434: 1, L0581: 1 and L0593: 1.			
HOCPX01	HOCPX01R	1409	99 - 296	3584	Glu-24 to Ser-29.				
HOCPY70	HOCPY70R	1410	266 - 442	3585		H0617: 5, L0769: 4, L0776: 4, L0751: 4, L0747: 4, L0774: 3, H0685: 2, H0657: 2, H0483: 2, H0486: 2, H0052: 2, H0674: 2, H0494: 2, L0775: 2, L0518: 2, H0682: 2, L0603: 2, H0170: 1, S6024: 1, S0116: 1, H0664: 1, H0306: 1,			

HOCPZ76	HOCPZ76R	1411	2 - 460	3586	Pro-93 to Arg-99, Ser-143 to Val-149.	S0420: 1, S0376: 1, S0360: 1, S0007: 1, S0300: 1, S0222: 1, S6014: 1, H0250: 1, L0021: 1, L0022: 1, S0049: 1, H0309: 1, H0150: 1, H0009: 1, S0051: 1, H0188: 1, T0006: 1, H0604: 1, H0673: 1, H0169: 1, H0087: 1, L0065: 1, L0763: 1, L0638: 1, L0773: 1, L0662: 1, L0768: 1, L0766: 1, L0649: 1, L0651: 1, L0657: 1, L0540: 1, L0783: 1, L0809: 1, L0530: 1, L0787: 1, L0789: 1, L0665: 1, S0374: 1, S0126: 1, H0684: 1, H0660: 1, H0539: 1, S0380: 1, H0576: 1, L0741: 1, L0742: 1, L0749: 1, L0750: 1, L0779: 1, L0759: 1, S0031: 1 and L0590: 1.		
HOCQA25	HOCQA25R	1412	352 - 543	3587	Ser-25 to Ser-30.	S0358: 45, S0360: 30,			

		S0374: 22, S0444: 21, L0662: 21, S0408: 19, L0666: 15, S0380: 14, L0664: 11, L0665: 11, S0026: 11, H0059: 10, S0328: 10, S0330: 10, H0251: 9, L0809: 8, H0670: 8, S0378: 8, H0661: 7, S0354: 7, S0440: 7, L0775: 7, L0659: 7, L0663: 7, H0672: 7, S0406: 7, S0442: 6, S0414: 6, L0657: 6, L0774: 5, H0659: 5, L0754: 5, S0434: 5, S0376: 4, L0483: 4, L0532: 4, H0547: 4, H0660: 4, L0602: 4, L0592: 4, S0460: 4, S0007: 3, H0529: 3, L0520: 3, L0803: 3, H0648: 3, S0404: 3, L0748: 3, L0747: 3, L0750: 3, L0759: 3, H0445: 3, L0608: 3, S0424: 3, H0663: 2, H0664: 2, H0580: 2, L0444: 2, H0156: 2, H0014: 2, H0615: 2, H0688: 2,				

		H0039: 2, H0644: 2, H0617: 2, H0032: 2, H0673: 2, L0763: 2, L0646: 2, L0804: 2, L0776: 2, H0627: 2, L0777: 2, L0758: 2, L0362: 2, H0506: 2, L0615: 1, H0685: 1, H0656: 1, L0778: 1, L0785: 1, H0341: 1, H0669: 1, H0662: 1, H0402: 1, S0356: 1, T0008: 1, S0476: 1, H0351: 1, H0299: 1, H0486: 1, H0013: 1, L0021: 1, T0082: 1, H0581: 1, H0421: 1, H0235: 1, H0596: 1, L0040: 1, H0178: 1, H0563: 1, H0012: 1, H0328: 1, H0031: 1, H0068: 1, H0135: 1, T0067: 1, H0264: 1, H0488: 1, H0100: 1, H0494: 1, S0352: 1, S0448: 1, S0450: 1, H0509: 1, S0472: 1, H0647: 1, H0695: 1, L0764: 1, L0765: 1, L0767: 1, L0768: 1,				

						L0364: 1, L0766: 1, L5568: 1, L0552: 1, L0376: 1, L0653: 1, L0655: 1, L0529: 1, H0144: 1, H0520: 1, H0690: 1, H0682: 1, H0684: 1, H0435: 1, H0658: 1, S0392: 1, H0478: 1, H0626: 1, H0631: 1, L0744: 1, L0751: 1, L0749: 1, L0779: 1, L0755: 1, S0308: 1, H0707: 1, L0596: 1, L0593: 1 and S0384: 1.		
HOCQA26	HOCQA26R	1413	1 - 384	3588					
HOCQA37	HOCQA37R	1414	13 - 276	3589					
HOCQA86	HOCQA86R	1415	3 - 455	3590					
HOCQB18	HOCQB18R	1416	3 - 473	3591	Met-1 to Leu-6, Gly-19 to Lys-26, Ala-32 to Lys-38, Ala-89 to Leu-94, Gly-134 to Val-141.				
HOCQB48	HOCQB48R	1417	1 - 588	3592	Met-36 to Pro-42, Pro-49 to Thr-55, Leu-104 to Met-110, Trp-112 to Asn-117, Glu-122 to Tyr-134, Gln-142 to Ser-148, Leu-174 to Tyr-180.				

HOCQC57	HOCQC57R	1418	1 - 237	3593			
							L0766: 6, L0752: 5, L0794: 4, H0039: 3, H0622: 3, S0440: 3, L0770: 3, L0809: 3, H0547: 3, L0747: 3, S0356: 2, H0587: 2, H0427: 2, H0156: 2, H0015: 2, H0031: 2, L0771: 2, L0662: 2, L0768: 2, L0804: 2, L0659: 2, L0666: 2, L0664: 2, L0438: 2, H0660: 2, L0740: 2, L0754: 2, L0745: 2, L0749: 2, L0731: 2, L0593: 2, H0624: 1, H0657: 1, H0656: 1, H0370: 1, H0438: 1, T0040: 1, L0586: 1, T0114: 1, H0036: 1, S0010: 1, H0052: 1, H0545: 1, H0050: 1, H0014: 1, H0373: 1, L0163: 1, H0051: 1, H0071: 1, T0010: 1, H0030: 1, H0316: 1, H0598: 1, H0090: 1, S0038: 1, H0561: 1, H0509: 1, H0130: 1, H0633: 1, S0002: 1,

						L0500: 1, L0761: 1, L0764: 1, L0773: 1, L0649: 1, L0375: 1, L0805: 1, L0653: 1, L0544: 1, L0545: 1, L0792: 1, L0663: 1, L0665: 1, H0670: 1, H0666: 1, H0521: 1, L0743: 1, L0439: 1, L0777: 1, L0755: 1, L0758: 1, L0596: 1, L0589: 1, L0592: 1, H0216: 1, H0542: 1, H0423: 1 and H0352: 1.		
HOCQC71	HOCQC71R	1419	216 - 521	3594	Thr-21 to Gly-28, Lys-36 to Gly-43, Ala-73 to His-85.			
HOCQD10	HOCQD10R	1420	2 - 529	3595				
HOCQD19	HOCQD19R	1421	3 - 335	3596	Gly-70 to Gly-79.		H0556: 2, H0519: 2, S0116: 1, H0370: 1, H0063: 1, L0800: 1, L0803: 1, L0383: 1, L0789: 1, H0593: 1, H0659: 1, H0660: 1, L0777: 1 and H0665: 1.	
HOCQD38	HOCQD38R	1422	290 - 550	3597			L0748: 49, L0766: 22, H0457: 12, L0439: 12, H0581: 11, L0659: 11, L0754: 11, L0745: 10, L0662: 9, L0665: 9,	

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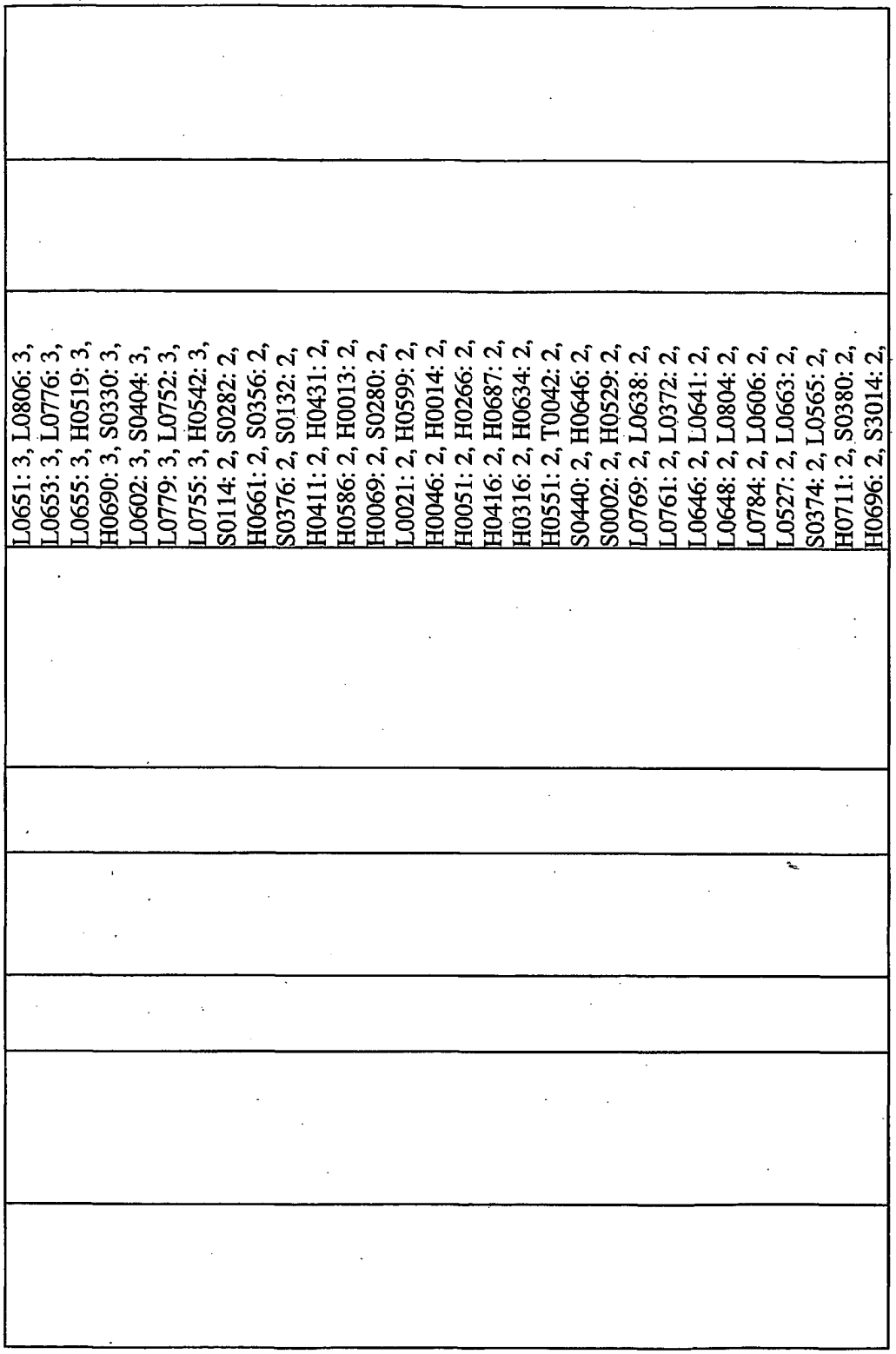
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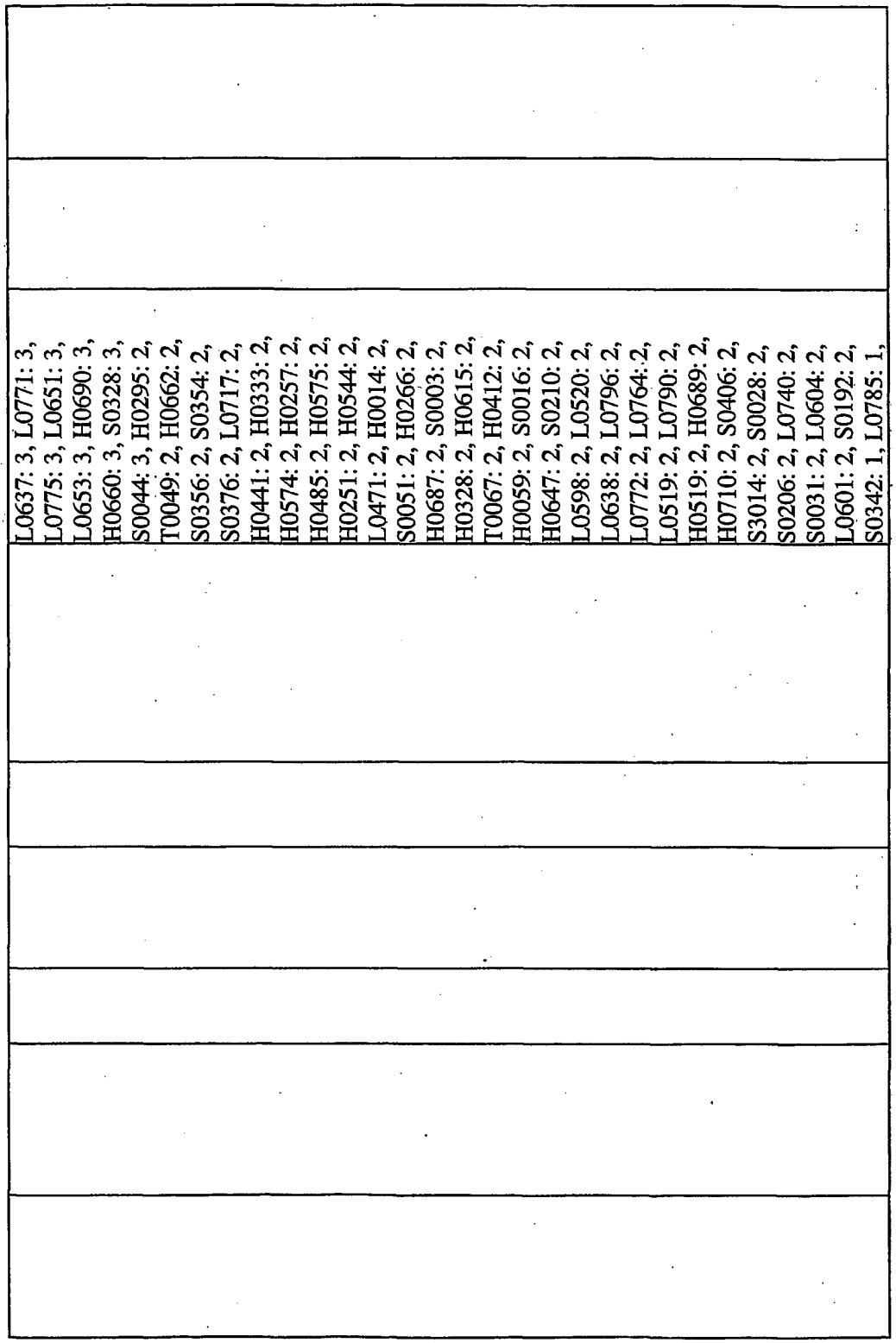
					3598	Ala-1 to Gly-8, Leu-26 to Ser-40, Pro-57 to Leu-95.		
				1 - 315				
			1423					
		HOCQD42R						
HOCQD42								

HOCQD45	HOCQD45R	1424	38 - 475	3599	Arg-11 to Arg-20, Glu-61 to Ser-66, Pro-114 to Ala-125.			
HOCQE35	HOCQE35R	1425	3 - 410	3600				
HOCQG94	HOCQG94R	1426	3 - 317	3601	Glu-58 to Arg-63.			
HOCQH81	HOCQH81R	1427	144 - 335	3602				
HOCQI31	HOCQI31R	1428	1 - 324	3603	Lys-21 to His-26, Arg-47 to Val-55, Ser-65 to Gly-70, Ala-76 to Gly-81.	S0126: 23, H0038: 16, S0372: 15, H0550: 12, H0031: 12, H0545: 10, L0659: 10, S0360: 9, L0662: 9, L0757: 9, L0758: 9, H0551: 8, S0322: 8, H0431: 7, L0666: 7, L0750: 7, H0486: 6, H0546: 6, S0440: 6, L0776: 6, H0549: 5, H0620: 5, L0664: 5, H0593: 5, H0672: 5, H0539: 5, S0380: 5, H0555: 5, L0747: 5, S0358: 4, S0007: 4, H0409: 4, S0010: 4, H0039: 4, H0622: 4, H0616: 4, L0769: 4, L0641: 4, L0655: 4, H0696: 4, L0731: 4, S0040: 3, S0212: 3, S0418: 3, S0045: 3, S0280: 3, H0012: 3, H0090: 3,		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HOCQJ35	HOCQJ35R	1429	61 - 546	3604	Leu-16 to Pro-22, Val-30 to Asp-36.	H0046: 12, L0771: 7, L0774: 3, L0651: 3, L0806: 3, L0666: 3, L0565: 3, L0748: 3, S0444: 2, S0408: 2, H0393: 2, L0372: 2, L0662: 2, L0766: 2, L0659: 2, L0664: 2, L0744: 2, L0731: 2, H0294: 1, S0442: 1, S0278: 1, H0549: 1, L0021: 1, H0085: 1, H0234: 1, H0596: 1, H0597: 1, H0546: 1, H0024: 1, S0003: 1, H0252: 1, H0383: 1, H0674: 1, H0068: 1, H0487: 1, H0413: 1, T0069: 1, H0100: 1, H0494: 1, H0625: 1, S0352: 1, L0761: 1, L0772: 1, L0646: 1, L0800: 1, L0764: 1, L0773: 1, L0794: 1,	L0748: 1, L0756: 1, L0777: 1, L0752: 1, L0755: 1, H0343: 1, H0707: 1, L0605: 1, H0668: 1, S0196: 1 and H0506: 1.		

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HOCQM24	HOCQM24R	1430	3 - 230	3605	Gly-2 to Gly-12, Gly-14 to Asn-28, Met-32 to Gly-49, Lys-54 to Phe-76.				
HODAF78	HODAF78R	1431	2 - 76	3606					
HODBT55	HODBT55R	1432	234 - 395	3607	Ala-1 to Ser-8.		H0328: 1 and H0435: 1.		
HODCT68	HODCT68R	1433	266 - 484	3608	Gln-1 to Pro-16.		L0493: 4, L0794: 3, H0497: 2, H0038: 2, L0766: 2, L0809: 2, L0779: 2, L0777: 2, L0759: 2, L0601: 2, H0170: 1, S0114: 1, H0341: 1, H0125: 1, S0046: 1, H0592: 1, H0587: 1, H0559: 1, H0156: 1, H0328: 1, H0616: 1, H0386: 1, H0538: 1, H0529: 1, L0769: 1, L0764: 1,		

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HODCZ52	HODCZ52R	1434	2 - 139	3609	AR089: 19, AR104: 18, AR060: 12, AR096: 7, AR055: 4, AR061: 3 L0751: 29, H0549: 17, H0550: 17, L0666: 9, L0747: 8, H0689: 7, H0690: 7, H0682: 7, H0615: 6, H0670: 6, H0328: 5, H0150: 4, H0660: 4, S0330: 4, S0044: 4, L0362: 4, H0597: 3, H0688: 3, L0764: 3, L0657: 3, L0809: 3, L0753: 3, L0758: 3, L0759: 3, H0431: 2, H0046: 2, T0067: 2, H0059: 2, H0647: 2, L0774: 2, L0805: 2, L0783: 2, L0438: 2, H0593: 2, H0648: 2, H0672: 2, S0328: 2, S0404: 2, L0744: 2, L0779: 2,		

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HODDI57	HODDI57R	1435	3 - 194	3610	Gly-7 to Glu-41.	L0794: 4, L0803: 4, H0328: 3, L0779: 3, L0515: 2, L0809: 2, H0144: 2, L0754: 2, L0756: 2, L0759: 2, H0171: 1, S0282: 1, H0346: 1, S0222: 1, H0441: 1, H0486: 1, H0069: 1, H0052: 1, H0544: 1, H0266: 1, L0598: 1, L0638: 1, L0766: 1, L0650: 1,	

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HODEJ47	HODEJ47R	1436	11 - 295				

							L0789: 1, L0663: 1, H0144: 1, S0330: 1, S0028: 1, L0751: 1, L0731: 1, L0750: 1, L0758: 1 and L0605: 1.	
HODEO42	HODEO42R	1437	1 - 54	3612				
HODEP78	HODEP78R	1438	187 - 432	3613			L0803: 7, L0439: 4, L0663: 3, L0749: 3, H0615: 2, L0769: 2, L0794: 2, L0774: 2, L0748: 2, L0777: 2, L0752: 2, L0142: 1, H0646: 1, L0767: 1, L0804: 1, L0784: 1, L0805: 1, L0789: 1, L0666: 1, L0438: 1, H0670: 1 and L0589: 1.	
HODEQ42	HODEQ42R	1439	349 - 444	3614	Asn-1 to Ser-6, Thr-22 to Asn-32.		H0615: 1 and S0031: 1.	
HODER57	HODER57R	1440	92 - 289	3615				
HODES60	HODES60R	1441	2 - 421	3616			L0662: 2, H0615: 1, L0761: 1, L0791: 1, H0519: 1, L0752: 1 and L0758: 1.	
HODEU47	HODEU47R	1442	153 - 347	3617	Ser-1 to Ser-9, Asp-15 to Ala-21.		H0615: 2	
HODEV69	HODEV69R	1443	370 - 546	3618				
HODEW54	HODEW54R	1444	374 - 568	3619			H0328: 1 and H0615: 1.	

HODEW79	HODEW79R	1445	309 - 566	3620					
HODEX45	HODEX45R	1446	220 - 423	3621			H0615: 2 and L0532: 1.		
HODEX69	HODEX69R	1447	58 - 231	3622			H0615: 4 and L0659: 1.		
HODEX79	HODEX79R	1448	1 - 432	3623					
HODFC44	HODFC44RP 00	1449	1 - 207	3624	Ala-9 to Asp-21, Thr-31 to Arg-37.	L0747: 16, L0754: 10, L0751: 7, L0757: 7, H0657: 6, L0748: 6, L0771: 5, H0659: 5, L0740: 5, L0755: 5, H0594: 4, L0744: 4, H0341: 3, S0358: 3, S0278: 3, H0333: 3, H0615: 3, S0366: 3, L0520: 3, L0775: 3, L0517: 3, S0374: 3, S0328: 3, L0731: 3, H0136: 3, T0002: 2, S0218: 2, S0116: 2, S0354: 2, S0376: 2, H0637: 2, S0045: 2, H0370: 2, L0622: 2, H0156: 2, H0599: 2, H0545: 2, H0266: 2, H0039: 2, H0617: 2, H0132: 2, L0769: 2, L0665: 2, H0672: 2, H0539: 2, H0134: 2, L0756: 2, L0752: 2,		

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HODFD90	HODFD90R	1450	3 - 281	3625	Ser-22 to Gln-38.	L0518: 1, L0783: 1, L0809: 1, L0666: 1, L0663: 1, H0144: 1, H0593: 1, H0682: 1, H0648: 1, S0044: 1, H0214: 1, L0439: 1, L0749: 1, L0750: 1, L0753: 1, H0444: 1, H0445: 1, H0595: 1, L0581: 1, L0593: 1 and H0542: 1.		
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HODFE81	HODFE81R	1451	296 - 433	3626				
HODFI68	HODFI68R	1452	293 - 409	3627		L0766: 2, H0328: 1 and H0615: 1.		
HODFJ14	HODFJ14R	1453	2 - 259	3628	Phe-45 to Tyr-60, Arg-67 to Glu-74.			
HODFJ52	HODFJ52R	1454	97 - 225	3629	Pro-18 to Pro-23, Pro-37 to Val-42.	H0328: 1 and H0615: 1.		
HODFK30	HODFK30RA	1455	1 - 69	3630				
HODFK89	HODFK89R	1456	16 - 324	3631	Lys-69 to Asp-81.			
HODFL50	HODFL50R	1457	1 - 165	3632		H0615: 2, H0370: 1, H0328: 1 and L0749: 1.		

HODFL75	HODFL75R	1458	304 - 393	3633	Ala-2 to Trp-9.			
HODFO16	HODFO16R	1459	251 - 565	3634		H0615: 2		
HODFO64	HODFO64R	1460	1 - 195	3635	Glu-12 to Gly-27, Gln-37 to Tyr-49.	L0666: 3, H0615: 2, S0116: 1, H0675: 1, H0012: 1, L0055: 1, S0438: 1, L0763: 1, L0667: 1, L0649: 1, L0803: 1, L0804: 1, L0659: 1, H0689: 1, H0659: 1, L0752: 1 and S0026: 1.		
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HODFQ19	HODFQ19R	1462	1 - 519	3637	Leu-33 to Val-40, Lys-144 to Glu-152.			
HODFQ37	HODFQ37R	1463	2 - 535	3638	His-1 to Lys-12, Gln-17 to Leu-27, Val-69 to Asp-76, Asp-122 to Trp-128, Asp-141 to Glu-146, Ser-155 to His-164.			
HODFR72	HODFR72R	1464	84 - 512	3639		H0615: 2		
HODFU24	HODFU24R	1465	372 - 695	3640				
HODFU78	HODFU78R	1466	2 - 130	3641				
HODFV22	HODFV22R	1467	291 - 467	3642	Pro-1 to Asp-7.			
HODFV60	HODFV60R	1468	7 - 168	3643		H0328: 1, H0615: 1 and L0365: 1.		
HODFV69	HODFV69R	1469	64 - 210	3644		H0615: 3, H0693: 2,		

HODFV79	HODFV79R	1470	360 - 623	3645		H0266: 1, S0002: 1, L0790: 1, H0547: 1, S0152: 1, H0521: 1, H0696: 1, L0366: 1, S0194: 1 and S0276: 1.			
HODFV82	HODFV82R	1471	14 - 154	3646					
HODFV95	HODFV95R	1472	587 - 718	3647					
HODFY38	HODFY38R	1473	22 - 309	3648	Lys-8 to Tyr-26, Thr-67 to Met-73.	H0615: 2, S0444: 1, L0438: 1 and L0439: 1.			
HODGA29	HODGA29R	1474	186 - 308	3649	Val-1 to Ser-9, Gln-22 to Ser-29.				
HODGB69	HODGB69R	1475	3 - 95	3650					
HODGB78	HODGB78R	1476	91 - 225	3651	Thr-14 to Asn-19.				
HODGE22	HODGE22R	1477	129 - 407	3652					
HODGH30	HODGH30R	1478	25 - 132	3653	Thr-7 to Ser-14, Pro-28 to Gly-36.				
HODGH43	HODGH43R	1479	36 - 128	3654	His-8 to Gly-18, Phe-25 to Gly-30.				
HODGH65	HODGH65R	1480	2 - 166	3655		H0615: 2			
HODGL65	HODGL65R	1481	127 - 300	3656		L0754: 2, L0756: 2, H0615: 1, L0438: 1 and L0747: 1.			
HODGN53	HODGN53R	1482	2 - 583	3657	Lys-1 to Thr-7, Ser-13 to Arg-33, Val-56 to Lys-63, Phe-143 to Thr-148.	L0741: 4, H0615: 2, L0769: 2, L0793: 2, H0328: 1, S0144: 1, L0794: 1, L0499: 1, L0805: 1, L0438: 1 and L0755: 1.			

HODGO02	HODGO02R	1483	361 - 561	3658					
HODGO09	HODGO09R	1484	1 - 348	3659		H0615: 2 and L0779: 1.			
HODGO21	HODGO21R	1485	2 - 193	3660	Glu-23 to Val-28, Arg-56 to Ser-64.				
HODGP53	HODGP53R	1486	1 - 198	3661					
HODGQ52	HODGQ52R	1487	9 - 131	3662					
HODGS83	HODGS83R	1488	205 - 354	3663					
HODGW91	HODGW91R	1489	182 - 3	3664	Lys-1 to Gly-12, Pro-25 to Thr-37, Ser-46 to Gly-51.				
HODGX46	HODGX46R	1490	358 - 513	3665		H0615: 3 and L0766: 1.			
HODGX91	HODGX91R	1491	219 - 572	3666					
HODGY90	HODGY90R	1492	379 - 573	3667					
HODGZ63	HODGZ63R	1493	1 - 504	3668	Pro-30 to Asn-35, Arg-39 to Asn-57, Ser-62 to Ile-67, Glu-73 to Arg-81, Lys-89 to Lys-99.	L0805: 19, L0794: 13, L0766: 12, L0740: 11, L0747: 11, L0779: 11, L0803: 8, H0521: 7, L0439: 7, L0731: 7, L0605: 7, S0474: 6, S0422: 6, L0769: 6, L0776: 5, L0665: 5, L0748: 5, L0758: 5, H0618: 4, S0010: 4, L0771: 4, L0789: 4, S3014: 4, H0341: 3, H0615: 3, L0659: 3, S0052: 3, L0438: 3,			

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HODGZ76	HODGZ76R	1494	12 - 179	3669				
HODHD23	HODHD23R	1495	3 - 134	3670	Pro-8 to Asn-18, Gln-25 to Glu-30.			
HODHD64	HODHD64R	1496	14 - 205	3671	Tyr-33 to Tyr-38.	H0615: 2		
HODHE36	HODHE36R	1497	190 - 366	3672		H0328: 1 and H0615: 1.		
HODHE54	HODHE54R	1498	3 - 515	3673	Glu-7 to Tyr-12, Glu-44 to Asp-49, Pro-57 to Gly-64, Leu-69 to Arg-74,			

					Thr-76 to Tyr-86.			
HODHE88	HODHE88R	1499	2 - 166	3674	Lys-42 to Asp-48.	H0328: 1 and H0615: 1.		
HODHG56	HODHG56R	1500	82 - 300	3675	Glu-11 to Trp-17, Val-22 to Ser-29, Asp-45 to Lys-52.			
HODHJ56	HODHJ56R	1501	281 - 499	3676	Trp-12 to Ile-18, Gln-40 to Leu-54.			
HODHK82	HODHK82R	1502	71 - 238	3677	Lys-17 to Ala-24.			
HODHK86	HODHK86R	1503	2 - 292	3678	Glu-1 to Gln-7, Met-64 to Gly-69.			
HODIG29	HODIG29R	1504	2 - 115	3679				
HODJL36	HODJL36RA	1505	218 - 472	3680	Lys-9 to Ser-15, Val-42 to Thr-50.	H0261: 1 and H0615: 1.		
HODJZ09	HODJZ09R	1506	31 - 594	3681	Phe-116 to Met-126.	AR104: 14, AR096: 13, AR089: 11, AR060: 10, AR055: 6, AR061: 5 H0615: 3, H0658: 2, H0661: 1 and L0355: 1.		
HODKB19	HODKB19R	1507	504 - 746	3682				
HODKB82	HODKB82R	1508	3 - 344	3683	Gln-40 to Glu-48, Phe-68 to Arg-77, Ile-108 to Glu-113.			
HODKB89	HODKB89R	1509	73 - 216	3684				
HODKB93	HODKB93R	1510	1 - 159	3685	Arg-33 to Thr-38.			
HODKC29	HODKC29R	1511	1 - 486	3686		S0360: 9, L0642: 5, L0752: 5, L0662: 4, L0659: 4, L0666: 4,		

		S0007: 3, L0646: 3, L0776: 3, L0750: 3, H0662: 2, S0444: 2, S0222: 2, L0483: 2, L0764: 2, L0648: 2, L0775: 2, L0665: 2, H0648: 2, L0779: 2, S0031: 2, S0110: 1, H0638: 1, S0418: 1, S0376: 1, S0408: 1, L0717: 1, H0331: 1, H0574: 1, S0414: 1, H0492: 1, H0156: 1, L0021: 1, S0049: 1, H0310: 1, H0327: 1, H0373: 1, T0010: 1, S6028: 1, H0615: 1, S0366: 1, S0036: 1, H0038: 1, H0616: 1, H0413: 1, T0041: 1, H0494: 1, S0438: 1, S0440: 1, H0509: 1, S0142: 1, S0210: 1, L0598: 1, L0762: 1, L0640: 1, L0631: 1, L0772: 1, L0766: 1, L0551: 1, L0774: 1, L0664: 1, H0547: 1, S0126: 1, H0659: 1, S0378: 1, S0152: 1,			

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HODKC67	HODKC67R	1512	242 - 373	3687		H0615: 2		
HODKD20	HODKD20R	1513	43 - 213	3688	Arg-11 to Ser-17, Leu-51 to Pro-57.			
HODKD64	HODKD64R	1514	413 - 237	3689	Pro-5 to Asn-10.	H0615: 2 and H0696: 1.		
HODKE85	HODKE85R	1515	314 - 412	3690	Ser-18 to Ile-23.	H0615: 2 and H0328: 1.		
HODKF91	HODKF91R	1516	244 - 417	3691	Lys-12 to Ser-18.			
HODKG09	HODKG09R	1517	28 - 240	3692				
HODKJ77	HODKJ77R	1518	452 - 595	3693		H0615: 2		
HODKK26	HODKK26R	1519	2 - 415	3694	Asp-40 to Gly-45, Leu-59 to Glu-67, Lys-95 to Ile-105, Asp-113 to Gly-118.			
HODKK40	HODKK40R	1520	1 - 642	3695	Ser-15 to Phe-23, Lys-41 to Tyr-46, Pro-48 to Val-59, Thr-90 to Ile-103, Ser-110 to Arg-116, Pro-123 to Lys-137, Lys-157 to Glu-167, Arg-178 to Arg-194.			
HODKK73	HODKK73R	1521	3 - 344	3696	Phe-106 to Pro-114.			

HODKK77	HODKK77R	1522	272 - 433	3697	Ser-8 to Asn-15.	H0615: 2		
HODKL56	HODKL56R	1523	439 - 579	3698				
HODKM25	HODKM25R	1524	36 - 149	3699				
HODKM31	HODKM31R	1525	1 - 210	3700				
HODKN65	HODKN65R	1526	2 - 409	3701				
HOECR39	HOECR39R	1527	20 - 328	3702		H0659: 4, L0770: 3, L0747: 3, H0663: 2, S0360: 2, L0521: 2, L0776: 2, S0126: 2, H0658: 2, S0406: 2, L0755: 2, L0758: 2, L0759: 2, S0242: 2, T0002: 1, H0686: 1, H0341: 1, L0616: 1, S0354: 1, S0408: 1, H0052: 1, H0009: 1, H0083: 1, H0266: 1, H0615: 1, L0483: 1, H0040: 1, H0561: 1, S0422: 1, L0520: 1, L0625: 1, L0662: 1, L0766: 1, L0649: 1, L0519: 1, H0648: 1, S3014: 1, L0748: 1 and L0779: 1.		
HOFAB77	HOFAB77R	1528	1 - 399	3703	Glu-10 to Ala-26, Lys-31 to Tyr-43, Lys-45 to Glu-50, Ile-96 to Lys-102, Asp-123 to Gly-128.			

HOFMF37	HOFMF37R	1529	95 - 277	3704				
HOFMF79	HOFMF79RA	1530	85 - 219	3705				
HOFMJ88	HOFMJ88R	1531	2 - 397	3706	Arg-1 to Phe-16.			
HOFMJ93	HOFMJ93R	1532	1 - 162	3707	His-3 to Ala-19.			
HOFMM84	HOFMM84R	1533	1 - 204	3708				
HOFMN93	HOFMN93R	1534	69 - 323	3709	Glu-8 to Thr-14.	H0415: 2		
HOFMP59	HOFMP59R	1535	1 - 423	3710	Ala-5 to Arg-14.			
HOFMT68	HOFMT68R	1536	50 - 289	3711	Asn-41 to Lys-56.			
HOFMT69	HOFMT69R	1537	1 - 264	3712				
HOFMU92	HOFMU92R	1538	1 - 369	3713				
HOFMV06	HOFMV06R	1539	3 - 296	3714	Asp-1 to Leu-10.			
HOFNF63	HOFNF63R	1540	2 - 481	3715	Arg-1 to Arg-8, Ala-22 to Met-31, Asp-51 to Gln-56.	H0415: 2		
HOFNF76	HOFNF76R	1541	2 - 421	3716	Arg-1 to Ala-6, Ser-68 to Arg-73, Arg-87 to Ala-93.			
HOFNG51	HOFNG51R	1542	25 - 387	3717	Arg-1 to Cys-10, Glu-75 to Arg-94, Arg-99 to Gly-115.			
HOFNK44	HOFNK44R	1543	1 - 186	3718	Lys-52 to Asp-57.			
HOFNY53	HOFNY53R	1544	2 - 232	3719	Arg-1 to Phe-7, Gly-24 to Arg-36.			
HOFOB65	HOFOB65R	1545	1 - 453	3720				
HOFOB79	HOFOB79RP 00A	1546	2 - 682	3721	Val-31 to Val-38, Phe-46 to Ile-59, Arg-120 to Gln-126.			
HOFOE22	HOFOE22R	1547	1 - 345	3722				
HOFOF47	HOFOF47R	1548	3 - 326	3723	Asn-49 to Leu-54.			

HOFOF56	HOFOF56R	1549	1 - 351	3724	Ala-4 to Arg-11.			
HOGAC46	HOGAC46R	1550	35 - 193	3725	Ala-1 to Tyr-6, Ile-17 to Ser-32.			
HOGAQ03	HOGAQ03R	1551	110 - 286	3726	Pro-34 to Lys-39.	H0436: 44, L0748: 14, L0439: 9, L0747: 9, L0769: 7, L0803: 7, L0740: 7, L0755: 7, L0758: 7, L0761: 6, L0662: 6, L0794: 6, L0766: 6, L0663: 6, L0779: 6, H0542: 6, L0717: 5, L0756: 5, H0052: 4, H0135: 4, L0774: 4, L0659: 4, L0665: 4, L0777: 4, L0780: 4, L0731: 4, L0759: 4, H0556: 3, S0420: 3, S0410: 3, S0422: 3, L0763: 3, L0649: 3, L0804: 3, L0805: 3, L0776: 3, L0438: 3, H0547: 3, H0672: 3, H0539: 3, L0754: 3, L0757: 3, L0591: 3, H0422: 3, S0040: 2, S0114: 2, S0116: 2, H0255: 2, H0619: 2, H0486: 2, T0039: 2, H0013: 2, H0635: 2, H0253: 2,		

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H0673: 1, H0038: 1,
H0634: 1, H0616: 1,
H0155: 1, H0264: 1,
S0038: 1, H0022: 1,
H0625: 1, H0538: 1,
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L0374: 1, L0764: 1,
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L0655: 1, L0657: 1,
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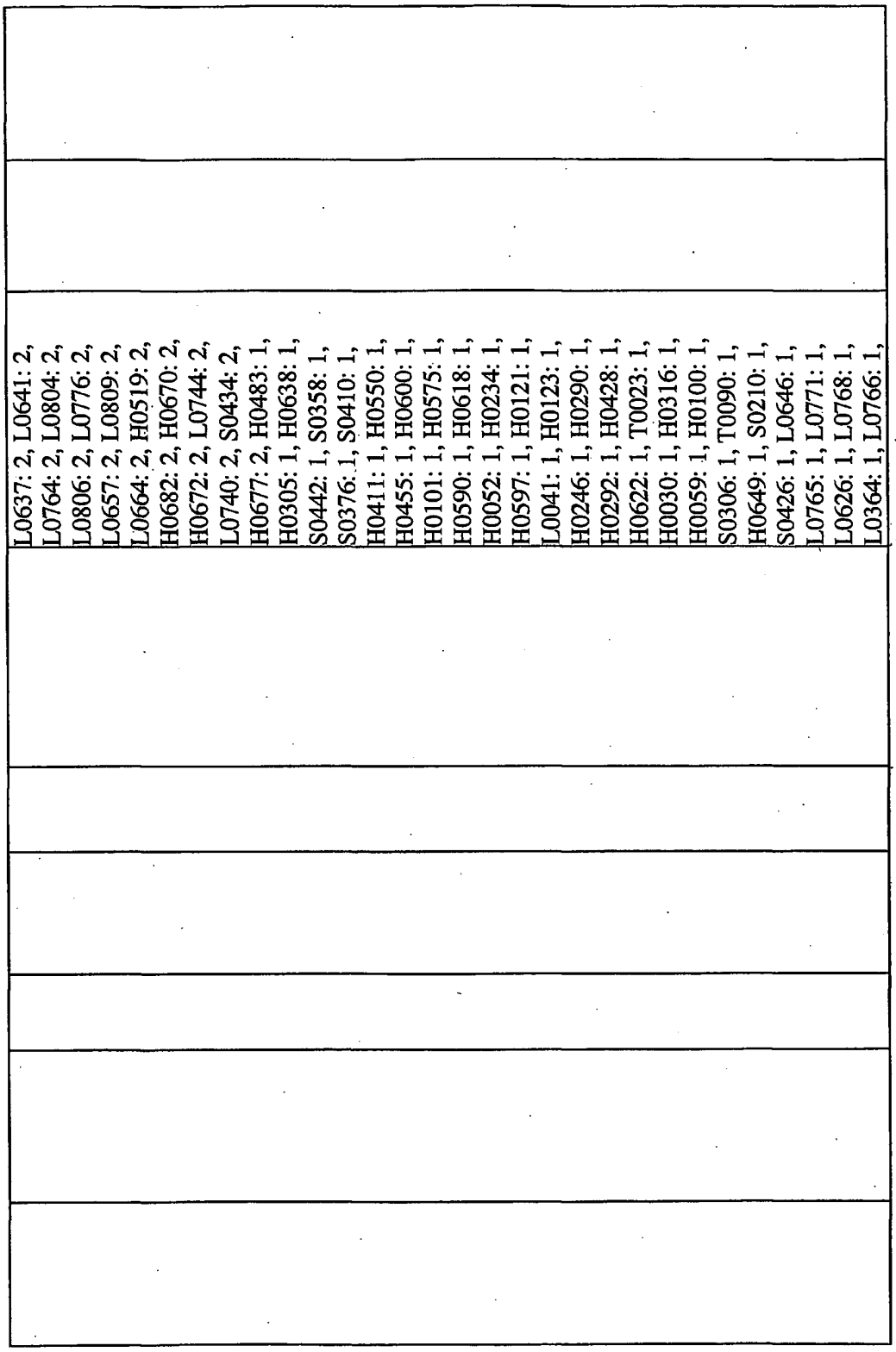
					Asp-15 to His-22.	L0777: 7, L0747: 6, L0779: 6, L0748: 5, L0776: 4, L0749: 4, L0770: 3, L0766: 3, L0759: 3, S0442: 2, L0769: 2, L0761: 2, L0771: 2, L0774: 2, L0527: 2, L0783: 2, L0665: 2, L0757: 2, L0758: 2, S0412: 2, H0402: 1, S0444: 1, H0438: 1, H0587: 1, H0333: 1, L0471: 1, H0674: 1, H0646: 1, L0763: 1, L0643: 1, L0764: 1, L0662: 1, L0363: 1, L0767: 1, L0387: 1, L0803: 1, L0526: 1, L0647: 1, L0663: 1, H0690: 1,
			3727				
			265 - 591				
			1552				
		HOGBE60R					
	HOGBE60						

HOGCF48	HOGCF48R	1553	230 - 436	3728		H0435: 1, S0330: 1, S0406: 1, L0740: 1, L0751: 1, L0780: 1, S0436: 1 and L0596: 1.		
HOGCG83	HOGCG83R	1554	50 - 409	3729				
HOGCH23	HOGCH23R	1555	58 - 207	3730				
HOGCI28	HOGCI28R	1556	3 - 332	3731		H0435: 4, H0726: 3, L0748: 3, H0355: 2, H0059: 2, L0525: 2, H0713: 1, H0717: 1, H0586: 1, H0427: 1, H0575: 1, H0744: 1, H0327: 1, H0271: 1, H0622: 1, H0087: 1, S0438: 1, L0792: 1, H0593: 1, H0555: 1, L0698: 1 and H0506: 1.		
HOGCJ10	HOGCJ10R	1557	10 - 480	3732		H0052: 1, H0135: 1, H0429: 1, H0519: 1 and H0435: 1.		
HOGCJ42	HOGCJ42R	1558	3 - 254	3733	Val-6 to Ala-11.			
HOGCJ55	HOGCJ55R	1559	7 - 507	3734	Thr-56 to Glu-61, Lys-87 to Lys-95, Thr-110 to Arg-118.			
HOGCP07	HOGCP07R	1560	3 - 143	3735				
HOGCP86	HOGCP86RA	1561	1 - 486	3736	Arg-11 to Arg-16, Pro-46 to Thr-52, His-58 to Pro-65,			

HOGCT44	HOGCT44R	1562	1 - 183	3737	His-14 to Phe-20, Ser-37 to Gly-60.	Ala-71 to Trp-77, Pro-134 to Gly-146.			
HOGCV85	HOGCV85R	1563	3 - 443	3738	Gly-20 to Leu-28, Val-33 to Gly-41, Thr-43 to Gly-55, Val-58 to Arg-66.				
HOGCV93	HOGCV93R	1564	22 - 513	3739	Lys-7 to Thr-13, Asp-24 to Thr-30, Gly-39 to Glu-52, Leu-70 to Arg-76, Phe-87 to Tyr-92.				
HOGCY12	HOGCY12R	1565	2 - 235	3740	Lys-2 to Thr-8, Asp-19 to Thr-25, Gly-34 to Glu-47, Leu-65 to Arg-71.				
HOGCY58	HOGCY58R	1566	3 - 338	3741	Asn-5 to Gln-12, Gln-19 to Glu-25, Arg-78 to Glu-99, Thr-106 to Ala-111.				
HOGCY74	HOGCY74R	1567	3 - 260	3742	Arg-1 to Asn-8, Phe-18 to His-24, Asp-57 to Lys-62, Lys-76 to Asp-81.				
HOGDD29	HOGDD29R	1568	3 - 152	3743					
HOGDE77	HOGDE77R	1569	95 - 184	3744					
HOGDG03	HOGDG03R	1570	2 - 397	3745	Thr-9 to His-19, Leu-35 to Ala-46,				

HOGDG76	HOGDG76R	1571	3 - 497	3746	Pro-55 to Pro-60, Gly-69 to Arg-74. Arg-35 to Gly-40, His-51 to Lys-56, Phe-94 to Ser-99, Thr-102 to Gly-107, Pro-113 to Ser-120.	L0665: 3, H0682: 2, H0435: 2, L0751: 2, H0663: 1, L0021: 1, H0647: 1, L0806: 1, L0664: 1, H0683: 1, H0670: 1 and H0660: 1.			
HOGDI44	HOGDI44R	1572	1 - 342	3747	Gln-58 to Gln-64, Cys-73 to Arg-88.				
HOGDI49	HOGDI49R	1573	124 - 357	3748					
HOGDO25	HOGDO25R	1574	2 - 322	3749	Pro-38 to Met-44.				
HOGDO58	HOGDO58R	1575	74 - 244	3750	Pro-6 to Tyr-17, Val-39 to Gln-45.				
HOGDP10	HOGDP10R	1576	3 - 299	3751	Glu-3 to Glu-14.				
HOGDQ54	HOGDQ54R	1577	3 - 335	3752					
HOGDQ95	HOGDQ95R	1578	22 - 492	3753	Arg-9 to Val-17.				
HOGDR70	HOGDR70R	1579	48 - 470	3754	Arg-9 to Arg-18, Arg-27 to Arg-35, Arg-47 to Asp-55, Asp-78 to Lys-83.				
HOGDV93	HOGDV93R	1580	1 - 417	3755	Gly-1 to Ala-6, Glu-54 to Ile-62, Asp-89 to Thr-98.				
HOGEA27	HOGEA27R	1581	2 - 241	3756					
HOGED85	HOGED85R	1582	3 - 326	3757	Tyr-94 to Phe-99.				
HOGEK25	HOGEK25R	1583	2 - 325	3758					
HOGEN30	HOGEN30R	1584	2 - 325	3759	Leu-3 to Arg-19.				
HOGEN55	HOGEN55R	1585	2 - 226	3760					

HOGEP46	HOGEP46R	1586	3 - 212	3761	Gly-17 to Asn-27, Ser-51 to His-61.	L0521: 1, L0662: 1 and H0435: 1.		
HOGEP69	HOGEP69R	1587	2 - 223	3762				
HOGET60	HOGET60R	1588	2 - 376	3763		H0295: 8, H0617: 7, L0665: 7, H0435: 7, H0592: 6, H0494: 6, L0439: 6, L0751: 6, S0360: 5, S0046: 4, H0587: 4, H0012: 4, H0264: 4, L0662: 4, S0406: 4, H0586: 3, H0620: 3, H0031: 3, H0551: 3, S0440: 3, S0002: 3, L0763: 3, L0648: 3, L0649: 3, L0774: 3, L0659: 3, H0520: 3, H0547: 3, H0689: 3, H0660: 3, S0328: 3, S0330: 3, L0748: 3, L0754: 3, L0750: 3, H0294: 2, H0650: 2, H0341: 2, S0356: 2, S0132: 2, H0370: 2, H0333: 2, H0643: 2, L0623: 2, H0706: 2, H0081: 2, H0039: 2, H0553: 2, H0181: 2, H0068: 2, H0135: 2, H0040: 2, H0646: 2, L0640: 2,		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HOGEU84	HOGEU84R	1589	3 - 368	3764	Pro-8 to Asn-34, Ala-39 to Arg-53.	L0375: 1, L0651: 1, L0378: 1, L0653: 1, L0655: 1, L0558: 1, L0635: 1, L0518: 1, L0383: 1, L0792: 1, L0663: 1, S0006: 1, H0696: 1, S0044: 1, S3014: 1, L0743: 1, L0752: 1, L0755: 1, L0731: 1, L0759: 1, H0216: 1, H0543: 1, S0424: 1 and H0506: 1.	AR096: 1, AR104: 1, AR055: 0, AR061: 0, AR060: 0, AR089: 0 S0250: 1 and H0435: 1.		
HOGEW58	HOGEW58R	1590	1 - 417	3765					
HOGEW72	HOGEW72R	1591	256 - 333	3766					
HOGEZ03	HOGEZ03R	1592	52 - 144	3767					
HOGEZ27	HOGEZ27R	1593	2 - 307	3768					
HOHDI15	HOHDI15R	1594	3 - 170	3769					
HOOHB44	HOOHB44R	1595	128 - 313	3770	Ser-1 to Gln-6, Ser-51 to Thr-56.				
HOOHC27	HOOHC27R	1596	9 - 194	3771	Gly-4 to Lys-10.				
HOOHJ69	HOOHJ69R	1597	9 - 152	3772	Gly-4 to Lys-10.		H0637: 2, H0413: 1 and H0648: 1.		
HOOHK47	HOOHK47R	1598	126 - 260	3773					
HOOHL15	HOOHL15R	1599	60 - 383	3774					
HOOHL19	HOOHL19R	1600	14 - 205	3775	Pro-17 to Ser-24.				

HOOHL68	HOOHL68R	1601	271 - 570	3776		L0748: 11, L0666: 5, L0750: 5, L0805: 4, L0663: 4, L0664: 4, L0439: 4, L0662: 3, L0758: 3, L0005: 2, H0587: 2, H0318: 2, H0052: 2, H0024: 2, H0553: 2, L0770: 2, L0648: 2, L0766: 2, L0497: 2, L0665: 2, H0519: 2, H0648: 2, L0740: 2, L0731: 2, L0593: 2, H0677: 2, H0170: 1, H0583: 1, H0638: 1, H0586: 1, H0331: 1, H0486: 1, H0013: 1, H0156: 1, H0036: 1, L0040: 1, H0620: 1, S6028: 1, H0328: 1, H0615: 1, T0023: 1, S0036: 1, H0591: 1, H0040: 1, T0067: 1, S0472: 1, H0529: 1, L0761: 1, L0764: 1, L0771: 1, L0649: 1, L0803: 1, L0804: 1, L0775: 1, L0806: 1, L0655: 1, L0657: 1, L0659: 1, L0790: 1, H0144: 1,		

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HOOHP84	HOOHP84R	1602	1 - 186	3777					
HOOHQ09	HOOHQ09R	1603	161 - 313	3778	Lys-1 to Lys-13.				
HOOHQ83	HOOHQ83R	1604	67 - 399	3779	Pro-10 to Ser-37, Gln-41 to Thr-57, Arg-62 to Thr-68, Pro-80 to Lys-85, Gly-99 to Gly-106.				
HOOHR81	HOOHR81R	1605	336 - 500	3780					
HOOHS67	HOOHS67R	1606	69 - 281	3781					
HOOHS82	HOOHS82R	1607	53 - 145	3782					
HOOHT13	HOOHT13R	1608	3 - 194	3783	Glu-1 to Glu-11.				
HOOHX50	HOOHX50R	1609	17 - 163	3784					
HOOIA46	HOOIA46R	1610	3 - 239	3785			L0770: 12, H0657: 10, H0659: 9, L0776: 8, H0648: 8, L0755: 8, L0774: 7, S0410: 6, H0494: 6, L0769: 6, L0750: 6, S0408: 5, S0440: 5, L0775: 5, S0376: 4, S0360: 4, L0748: 4, L0777: 4, L0752: 4, L0759: 4, H0341: 3, S0358: 3,		

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HOOIA57	HOOIA57R	1611	251 - 361	3786	L0803: 14, L0439: 9, L0752: 9, L0666: 7, L0659: 5, S0328: 5, L0756: 5, L0731: 5, L0794: 4, S0412: 4, S0360: 3, H0634: 3,		

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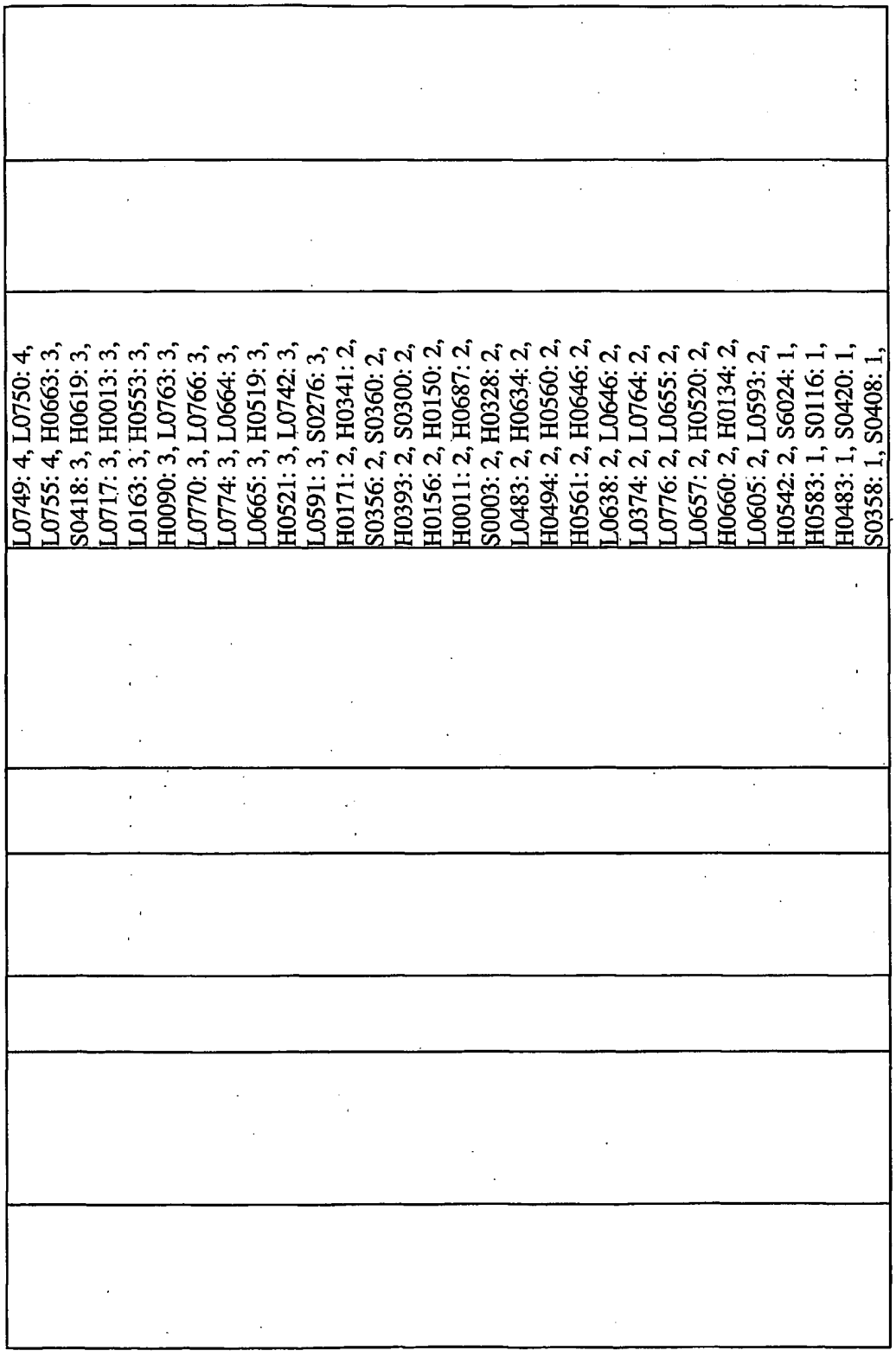
HOOIB54	HOOIB54R	1613	2 - 199	3788				

HOOIF71	HOOIF71R	1614	3 - 389	3789				
HOOIG71	HOOIG71R	1615	2 - 301	3790	Ile-1 to Lys-7, Gly-13 to Lys-19, Pro-59 to Arg-76.			
HOOIK04	HOOIK04R	1616	2 - 172	3791	Val-50 to Arg-56.			
HOOIL33	HOOIL33R	1617	97 - 264	3792	Leu-41 to Ser-52.			
HOOIO53	HOOIO53R	1618	3 - 164	3793				
HOOIR94	HOOIR94R	1619	20 - 109	3794				
HOOJA64	HOOJA64R	1620	272 - 400	3795				
HOOJB36	HOOJB36R	1621	118 - 315	3796				
HOOJE93	HOOJE93R	1622	125 - 268	3797				
HOOJK91	HOOJK91R	1623	80 - 211	3798				
HOOJN84	HOOJN84R	1624	1 - 189	3799	Asp-48 to Thr-54, Glu-57 to Ser-63.	L0758: 14, L0747: 10, L0752: 10, L0731: 10, L0663: 9, H0547: 9, L0740: 9, L0666: 8, H0046: 7, S0126: 7, L0748: 7, H0539: 6, L0439: 6, L0759: 6, L0595: 6, H0543: 6, H0050: 5, H0031: 5, H0648: 5, S0328: 5, H0624: 4, H0657: 4, H0656: 4, S0007: 4, H0549: 4, H0550: 4, H0591: 4, H0616: 4, H0551: 4, L0769: 4, L0662: 4, L0659: 4, H0144: 4, L0438: 4,		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HOOJP58	HOOJP58R	1625	93 - 248	3800				
HOOJR60	HOOJR60R	1626	160 - 306	3801		H0648: 2, H0436: 2, L0748: 2, S0360: 1, L0766: 1, L0803: 1 and L0779: 1.		
HOOJR72	HOOJR72R	1627	77 - 265	3802				
HOOJS84	HOOJS84R	1628	78 - 290	3803				
HOOJT32	HOOJT32R	1629	1 - 237	3804				
HOOJT65	HOOJT65R	1630	2 - 340	3805	Ala-2 to Asp-10.			
HOOJV78	HOOJV78R	1631	318 - 560	3806		H0486: 1 and H0648: 1.		
HOOJX42	HOOJX42R	1632	317 - 463	3807				
HOOJX80	HOOJX80R	1633	106 - 267	3808	Arg-11 to Pro-22, Asn-42 to Lys-48.	L0731: 2, H0483: 1, T0007: 1, T0039: 1, H0562: 1, L0769: 1, L0766: 1, H0670: 1, H0648: 1, L0756: 1, L0755: 1, L0758: 1, L0759: 1 and L0485: 1.		
HOOJY17	HOOJY17R	1634	147 - 479	3809	Pro-8 to Phe-18.			

HOOJY41	HOOJY41R	1635	51 - 347	3810				
HOOJY44	HOOJY44R	1636	2 - 184	3811	Gln-1 to Cys-7, Asn-14 to Lys-22, Arg-29 to Leu-34, Glu-46 to Leu-54.			
HOOJY80	HOOJY80R	1637	1 - 462	3812	Ala-1 to Pro-6, Ala-22 to Glu-27, Glu-36 to Ser-45, Glu-62 to Gly-67, Gln-74 to Phe-83, Thr-90 to Ser-96, His-105 to Pro-116.			
HOOJY92	HOOJY92R	1638	3 - 437	3813		H0547: 16, H0090: 11, H0543: 10, H0542: 9, H0341: 8, L0471: 8, H0551: 8, S0358: 7, H0561: 7, S0126: 7, H0521: 7, H0657: 5, H0013: 5, S0440: 5, H0529: 5, H0144: 5, H0519: 5, H0265: 4, S0040: 4, H0264: 4, H0560: 4, H0520: 4, S0027: 4, L0731: 4, L0591: 4, L0592: 4, L0595: 4, H0423: 4, S0424: 4, H0170: 3, H0686: 3, H0638: 3, S0360: 3, S0410: 3, H0580: 3, H0486: 3,		

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HOOKK83	HOOKK83R	1639	107 - 367	3814					
HOOKN43	HOOKN43R	1640	118 - 453	3815	Asp-1 to Lys-22.				
HOOKN71	HOOKN71R	1641	210 - 344	3816			H0657: 3, L0717: 2, H0421: 2, L0766: 2, L0666: 2, L0756: 2, L0759: 2, H0717: 1, H0587: 1, H0156: 1, L0021: 1, H0581: 1, H0014: 1, H0252: 1, S0422: 1, L0662: 1, L0794: 1, L0655: 1, L0809: 1, L0543: 1, L0791: 1, L0665: 1, H0658: 1, H0670: 1, H0648: 1, H0672: 1, H0696: 1, L0780: 1, S0434: 1 and H0506: 1.		
HOPJA09	HOPJA09R	1642	14 - 196	3817	Pro-20 to Gly-38.				
HOPJF95	HOPJF95R	1643	107 - 571	3818					
HOPJG60	HOPJG60R	1644	207 - 461	3819	Gly-69 to Glu-78.		L0775: 5, L0776: 5, L0747: 5, L0604: 5, L0769: 4, L0805: 4,		

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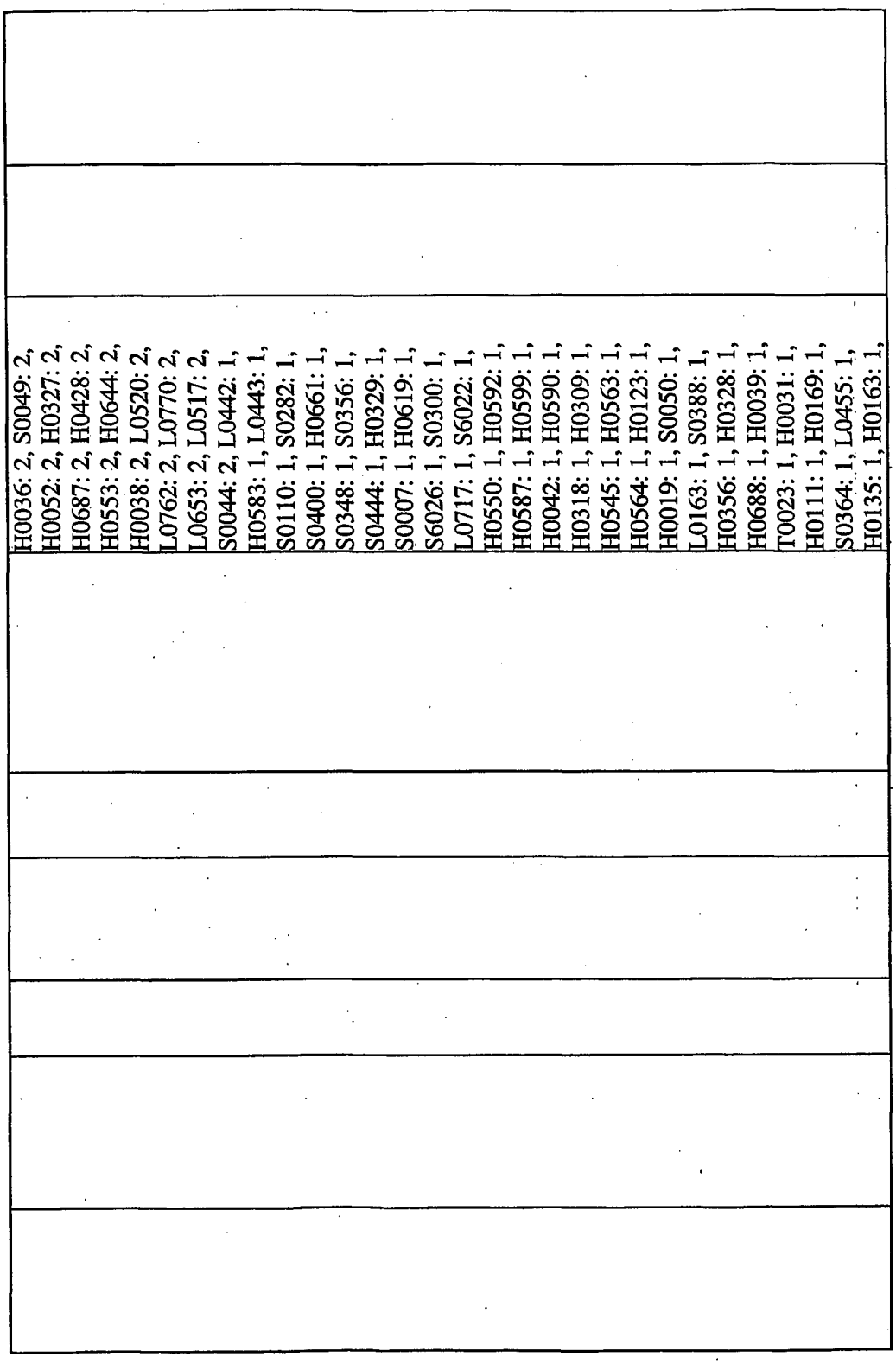
HOPJG79	HOPJG79R	1646	3 - 542	3821	Ala-83 to Arg-91, Trp-99 to Tyr-105, Tyr-123 to Glu-128.	L0755: 1, L0757: 1, L0758: 1 and S0276: 1.			
HOPJG89	HOPJG89R	1647	166 - 597	3822	Gly-2 to Ala-13.				
HOPJH17	HOPJH17R	1648	321 - 464	3823					
HOPJH38	HOPJH38R	1649	148 - 285	3824		S0412: 22, L0662: 19, L0777: 14, S0010: 11, S0222: 9, S6028: 9, L0750: 9, T0010: 8, L0659: 8, L0747: 8, L0756: 8, L0663: 7, L0439: 7, H0051: 6, L0518: 6, L0754: 6, L0752: 6, S0280: 5, H0575: 5, S0358: 4, S0346: 4, L0753: 4, H0170: 3, H0662: 3, S0360: 3, H0427: 3, L0471: 3, H0373: 3, L0638: 3, L0637: 3, L0764: 3, L0774: 3, L0809: 3, L0666: 3, S0310: 3, H0672: 3, H0696: 3, L0731: 3, H0506: 3, H0713: 2, S0408: 2, H0411: 2, H0455: 2, H0574: 2, S0414: 2, H0486: 2,			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H0688: 1, H0039: 1,
T0023: 1, H0031: 1,
H0111: 1, H0169: 1,
S0364: 1, L0455: 1,
H0135: 1, H0163: 1,

HOPJH65	HOPJH65R	1650	6 - 497	3825		Ala-1 to Gly-11, Asn-20 to Pro-25.	T0067: 1, T0069: 1, T0004: 1, H0100: 1, S0112: 1, L0370: 1, L0598: 1, L0769: 1, L0630: 1, L0800: 1, L0648: 1, L0363: 1, L0768: 1, L0649: 1, L0803: 1, L0775: 1, L0375: 1, L0651: 1, L0784: 1, L0523: 1, L0805: 1, L0776: 1, L0527: 1, L0657: 1, L0635: 1, L0783: 1, L0789: 1, L0532: 1, L0664: 1, H0691: 1, T0068: 1, S0148: 1, H0693: 1, H0520: 1, H0593: 1, H0689: 1, H0684: 1, S0330: 1, S0380: 1, S0174: 1, H0555: 1, L0612: 1, L0743: 1, L0748: 1, L0751: 1, L0749: 1, L0779: 1, L0759: 1, L0689: 1, S0434: 1, L0604: 1, L0366: 1, S0106: 1 and S0021: 1.		
HOPJM63	HOPJM63R	1651	101 - 250	3826		Pro-20 to Glu-25,	S0010: 1, H0327: 1,		

HOPJU10	HOPJU10R	1652	78 - 269	3827	Lys-31 to Gly-36.	H0039: 1, H0622: 1, S0464: 1, L0803: 1, H0684: 1 and H0670: 1.		
					Phe-15 to Ser-22.	L0665: 7, L0747: 7, L0662: 6, L0766: 6, L0655: 5, L0659: 5, S0126: 5, L0717: 4, H0370: 4, L0763: 4, L0770: 4, L0646: 4, H0521: 4, L0748: 4, S0360: 3, H0009: 3, S0142: 3, S0344: 3, L0771: 3, L0774: 3, L0775: 3, L0663: 3, L0664: 3, L0740: 3, L0751: 3, L0750: 3, L0758: 3, L0601: 3, H0265: 2, H0657: 2, S0418: 2, S0420: 2, S0045: 2, T0039: 2, H0024: 2, T0010: 2, H0413: 2, S0144: 2, S0210: 2, L0667: 2, L0372: 2, L0642: 2, L0765: 2, L0653: 2, L0383: 2, L0666: 2, L0744: 2, L0439: 2, L0754: 2, L0756: 2, L0731: 2, L0599: 2, H0543: 2, L0615: 1,		

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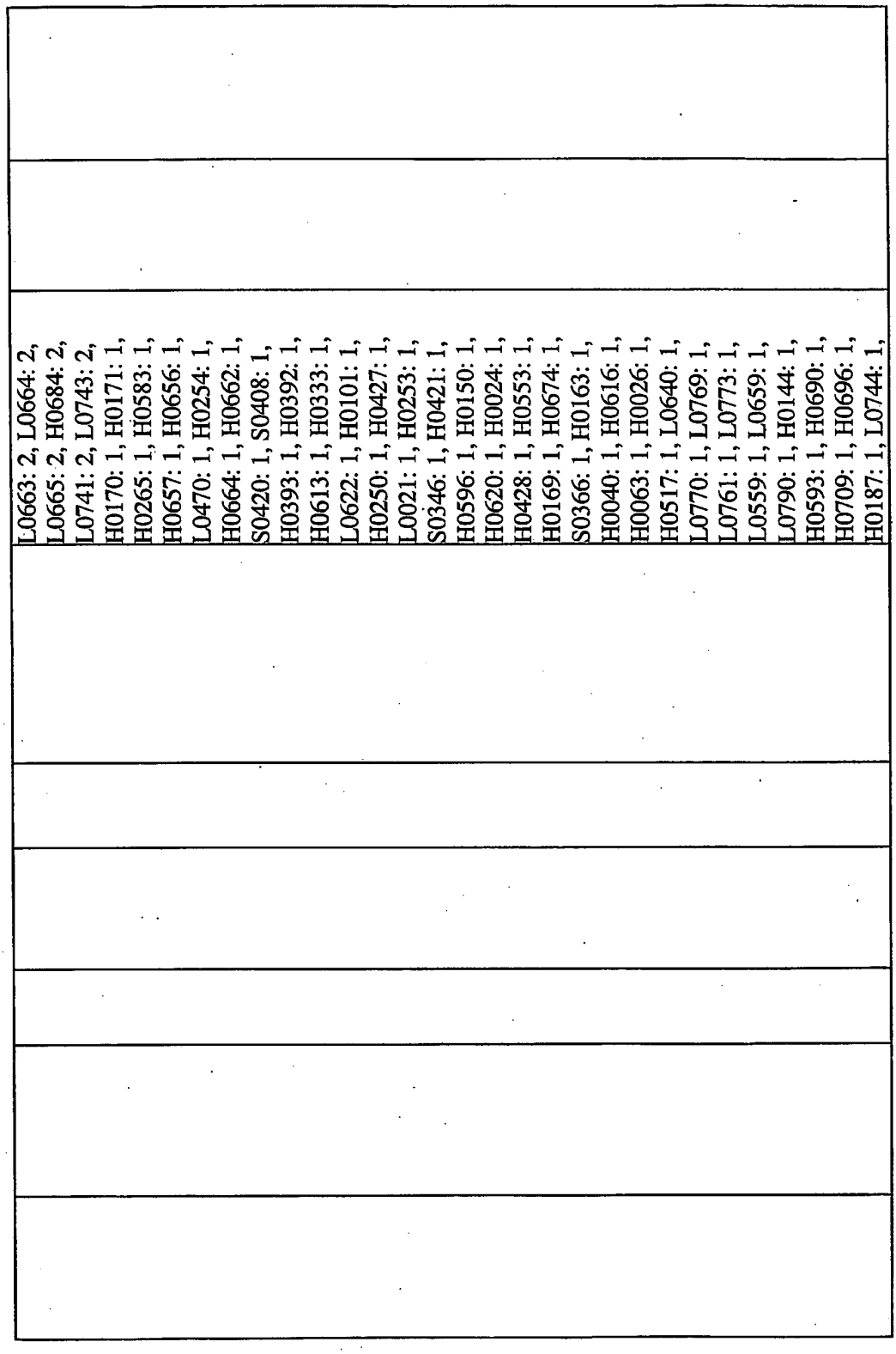
			3828	Arg-5 to His-22, Ser-59 to Ala-69.		
			1 - 207			
		1653				
	HOPJX48R					
HOPJX48						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HOPJY50	HOPJY50R	1654	273 - 395	3829		S0031: 1 and H0543: 1.			
HOPJZ59	HOPJZ59R	1655	2 - 163	3830	Pro-35 to Arg-48.				
HOPKA06	HOPKA06R	1656	2 - 676	3831	Arg-19 to Tyr-24, Asp-75 to Glu-87, Asn-102 to Cys-109, Ser-113 to Lys-118, Tyr-154 to Ser-169.	AR096: 4, AR089: 3, AR061: 1, AR055: 1, AR060: 1, AR104: 1 H0684: 2 and L0731: 1.			
HOPKC65	HOPKC65R	1657	26 - 232	3832	Leu-39 to Ser-51.				
HOPKD31	HOPKD31R	1658	3 - 191	3833	Ser-50 to Pro-57.				
HOPKG16	HOPKG16R	1659	1 - 456	3834	Asn-80 to Gly-86.				
HOPKG47	HOPKG47R	1660	1 - 579	3835	Pro-6 to Thr-34, Asp-57 to Gly-62, Gly-77 to Glu-83, Lys-108 to Asp-116, Met-145 to Arg-159.				
HOPKG83	HOPKG83R	1661	1 - 663	3836	Ser-72 to Ala-78, Asp-94 to Gly-100, Thr-104 to Asp-111, Ser-117 to Arg-133, Glu-138 to Lys-144, Lys-158 to Asp-165.				
HOPKK38	HOPKK38R	1662	3 - 455	3837	Ser-33 to Pro-42, Lys-53 to Cys-61.	H0494: 6, H0556: 5, H0265: 3, H0656: 3, H0618: 3, H0295: 2, H0255: 2, H0392: 2, H0575: 2, H0253: 2, H0052: 2, H0024: 2, H0617: 2, H0087: 2,			

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HOPKN14	HOPKN14R	1663	2 - 460	3838	Gly-63 to Ala-69, Gly-104 to Leu-110, Gly-130 to Gly-136.			
HOPKN67	HOPKN67R	1664	22 - 483	3839				
HOPKO04	HOPKO04RA	1665	170 - 319	3840		L0803: 6, L0731: 4, S0440: 3, L0662: 3, L0809: 3, L0665: 3, S0276: 3, H0486: 2, H0318: 2, L0794: 2, L0805: 2, L0776: 2, L0663: 2, H0684: 2, L0740: 2, L0759: 2, L0592: 2, H0624: 1, L0448: 1, H0341: 1, S0282: 1, H0663: 1, S0360: 1, H0580: 1, L0468: 1, H0587: 1, H0427: 1, H0575: 1, S0010: 1, L0471: 1, H0644: 1, H0383: 1, H0169: 1, L0456: 1, H0090: 1, H0264: 1,		

HOPKO61	HOPKO61R	1666	1 - 405	3841		H0412: 1, H0561: 1, S0150: 1, S0002: 1, H0529: 1, L0638: 1, L5565: 1, L0372: 1, L0649: 1, L0388: 1, L0659: 1, L0783: 1, L0789: 1, L0791: 1, H0519: 1, S0380: 1, H0522: 1, H0436: 1, L0747: 1, L0752: 1, L0757: 1, L0599: 1, H0542: 1, H0543: 1 and H0422: 1.			
HOPKP45	HOPKP45R	1667	282 - 536	3842					
HOPKQ20	HOPKQ20R	1668	19 - 402	3843	Ser-19 to Arg-29, Asp-37 to Val-43, Ala-75 to Leu-80, Thr-96 to Arg-111.				
HOPKQ82	HOPKQ82R	1669	1 - 519	3844					
HOPKR56	HOPKR56R	1670	3 - 173	3845		L0439: 15, L0666: 8, S0222: 6, L0794: 5, L0638: 3, L0805: 3, L0664: 3, L0758: 3, L0592: 3, S0010: 2, L0770: 2, L0438: 2, H0624: 1, H0170: 1, S6024: 1, H0441: 1, S0414: 1, H0052: 1, H0572: 1, S6028: 1,			

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HOPKU33	HOPKU33R	1671	2 - 274	3846				
HOVBH23	HOVBH23R	1672	2 - 136	3847	Gly-1 to Val-7.			
HOVBK37	HOVBK37R	1673	237 - 551	3848	Pro-7 to Trp-14.	L0794: 16, L0809: 6, S0360: 4, H0617: 3, L0803: 3, S0114: 2, H0288: 2, H0688: 2, H0494: 2, L0375: 2, L0731: 2, L0588: 2, H0556: 1, S0134: 1, H0484: 1, S0420: 1, H0637: 1, H0441: 1, H0370: 1, H0438: 1, H0592: 1, T0109: 1, S0010: 1, H0150: 1, H0009: 1, H0081: 1, H0271: 1, H0428: 1, S0368: 1, H0424: 1, H0181: 1, H0124: 1, S0438: 1, S0440: 1,		

HOVBK49	HOVBK49R	1674	3 - 86	3849	His-7 to Lys-20.	S0144: 1, S0142: 1, S0344: 1, L0637: 1, L5566: 1, L0761: 1, L0764: 1, L0648: 1, L0662: 1, L0364: 1, L0766: 1, L5574: 1, L0805: 1, L0783: 1, L0647: 1, L0789: 1, L0665: 1, H0520: 1, H0547: 1, H0670: 1, H0660: 1, H0648: 1, S0380: 1, H0521: 1, H0555: 1, S3012: 1, L0748: 1, L0779: 1, L0780: 1, L0757: 1, L0759: 1 and H0352: 1.		
HOVBS15	HOVBS15R	1675	144 - 404	3850	Glu-13 to Trp-32, Pro-34 to Asn-45.			
HOVBX41	HOVBX41R	1676	41 - 349	3851				
HOVCL23	HOVCL23R	1677	342 - 524	3852		S0360: 2, H0497: 2, H0333: 1, H0004: 1, H0428: 1, H0674: 1, S0422: 1, L0763: 1, L0803: 1, H0648: 1 and S0276: 1.		
HOVCN03	HOVCN03R	1678	2 - 127	3853	Gly-1 to Glu-7, Gly-29 to Ala-36.			
HOVCO26	HOVCO26R	1679	395 - 580	3854				
HOVCU89	HOVCU89R	1680	3 - 578	3855	Lys-63 to Ser-69,			

HOVCV33	HOVCV33R	1681	1 - 471	3856	Tyr-95 to His-102, Tyr-105 to Leu-111.				
HOVCW45	HOVCW45R	1682	2 - 226	3857	Ser-15 to Tyr-21, Gly-32 to Arg-37.	H0615: 2, L0748: 2, H0656: 1, S0007: 1, H0486: 1, H0041: 1, H0355: 1, S0250: 1, S0003: 1, H0688: 1, H0428: 1, H0622: 1, T0042: 1, L0768: 1, L0657: 1, L0526: 1, H0702: 1, L0565: 1, H0547: 1, H0519: 1, S0152: 1, S0390: 1, L0745: 1, L0749: 1, L0779: 1, L0588: 1, L0608: 1 and L0593: 1.			
HOVCY68	HOVCY68R	1683	333 - 551	3858					
HOVCZ45	HOVCZ45R	1684	53 - 220	3859	Ile-32 to Arg-37.				
HOVDB43	HOVDB43R	1685	110 - 289	3860					
HOVDB61	HOVDB61R	1686	34 - 204	3861					
HOVDB62	HOVDB62R	1687	1 - 270	3862					
HOVDB65	HOVDB65R	1688	37 - 498	3863					
HOVDD26	HOVDD26R	1689	24 - 257	3864					
HOVDE46	HOVDE46R	1690	253 - 393	3865	Asp-1 to Lys-6.				
HOVDG60	HOVDG60R	1691	92 - 184	3866					
HOVDG71	HOVDG71R	1692	74 - 154	3867					
HOVDH09	HOVDH09R	1693	3 - 365	3868	Pro-1 to Tyr-8,				

					Gln-14 to Gln-19, Arg-25 to Glu-37, Asn-44 to Arg-50, Glu-67 to Leu-75, Thr-105 to Gly-114.			
HOVDH75	HOVDH75R	1694	43 - 348	3869				
HOVDU91	HOVDU91R	1695	3 - 233	3870		L0794: 10, L0803: 7, L0747: 6, H0657: 5, H0597: 4, H0617: 4, L0764: 4, L0809: 4, L0758: 4, L0759: 4, L0800: 3, L0804: 3, L0775: 3, H0659: 3, H0543: 3, H0231: 2, L0471: 2, H0673: 2, H0674: 2, L0763: 2, L0770: 2, L0769: 2, L0768: 2, L0649: 2, L0375: 2, L0776: 2, H0658: 2, L0750: 2, L0779: 2, L0755: 2, L0731: 2, L0757: 2, L0596: 2, L0588: 2, S0026: 2, H0170: 1, H0483: 1, H0661: 1, H0402: 1, H0459: 1, S0360: 1, H0639: 1, L0717: 1, H0392: 1, H0607: 1, H0333: 1, H0486: 1, H0318: 1,			

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				3871			
			60 - 293				
		1696					
	HOVDV70R						
HOVDV70							

							L0766: 1, L0775: 1, L0776: 1, H0555: 1, L0742: 1, L0748: 1, L0757: 1 and L0759: 1.	
HOVDW60	HOVDW60R	1697	64 - 264	3872	Tyr-22 to Ala-28.		H0428: 1 and S3014: 1.	
HOVDZ66	HOVDZ66R	1698	99 - 257	3873	Gly-40 to His-48.		H0428: 2	
HOVEA43	HOVEA43R	1699	247 - 396	3874				
HOVEB25	HOVEB25R	1700	169 - 363	3875	Ala-20 to Gln-25.			
HOVEE84	HOVEE84R	1701	410 - 589	3876	Ser-7 to Trp-13, Phe-19 to Ala-25.			
HOVEE92	HOVEE92R	1702	3 - 143	3877			S0474: 66, L0439: 16, H0547: 15, L0748: 15, L0731: 10, S0360: 9, L0770: 9, S0408: 8, S0358: 7, L0771: 7, L0775: 7, L0747: 6, L0592: 6, H0428: 5, S0438: 5, L0659: 5, L0664: 5, L0665: 5, L0752: 5, L0757: 5, H0506: 5, S0007: 4, H0549: 4, S0440: 4, L0769: 4, L0768: 4, L0774: 4, L0663: 4, H0519: 4, S0152: 4, L0750: 4, L0779: 4, L0755: 4, L0759: 4, L0591: 4, L0595: 4, S0444: 3, H0510: 3, H0615: 3, H0551: 3,	

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HOVEF34	HOVEF34R	1703	288 - 497	3878				
HOVEF81	HOVEF81R	1704	1 - 393	3879	Gln-4 to Gln-10, Lys-35 to Ala-60, Pro-66 to Ser-79.	L0750: 11, L0740: 7, L0747: 5, H0341: 4, L0757: 4, H0641: 3, L0766: 3, L0748: 3, L0754: 3, L0752: 3, L0593: 3, H0171: 2, S0134: 2, S0442: 2, S0010: 2, H0428: 2, H0538: 2, L0770: 2, L0774: 2, L0776: 2, L0517: 2, L0438: 2, H0519: 2, H0684: 2, L0777: 2, L0755: 2, L0731: 2, L0758: 2, S0026: 2, H0170: 1, T0002: 1, S0114: 1, S0116: 1, H0663: 1, S0358: 1, S0360: 1, S0007: 1, S0046: 1,		

HOVEG73	HOVEG73R	1705	3 - 290	3880	Ser-9 to Gly-17, Ser-20 to Pro-26, Arg-32 to His-41.	H0411: 1, H0592: 1, H0486: 1, H0013: 1, L0022: 1, H0575: 1, H0581: 1, H0052: 1, H0251: 1, H0012: 1, H0620: 1, H0594: 1, H0398: 1, S0036: 1, H0090: 1, H0038: 1, H0040: 1, H0087: 1, L0475: 1, L0520: 1, L0630: 1, L0521: 1, L0662: 1, L0522: 1, L0803: 1, L0651: 1, L0652: 1, L0655: 1, L0661: 1, L0783: 1, L0809: 1, L0789: 1, L0666: 1, H0689: 1, H0682: 1, H0659: 1, H0670: 1, S0330: 1, H0539: 1, H0436: 1, L0605: 1, L0366: 1, S0276: 1, H0542: 1 and H0423: 1.		
HOVEJ15	HOVEJ15R	1706	160 - 468	3881		L0809: 8, L0794: 5, L0439: 5, L0758: 5, H0617: 4, L0438: 4, L0754: 4, L0731: 4,		

HOVEL51	HOVEL51R	1707	60 - 209	3882	Ser-13 to Val-21, Thr-45 to Ser-50.	H0295: 3, L0776: 3, H0619: 2, H0441: 2, H0253: 2, H0545: 2, H0188: 2, H0687: 2, H0428: 2, H0424: 2, H0213: 2, H0031: 2, L0769: 2, L0803: 2, L0792: 2, H0539: 2, L0748: 2, L0745: 2, L0747: 2, L0757: 2, H0717: 1, H0549: 1, S0222: 1, H0333: 1, H0318: 1, S0049: 1, L0738: 1, H0046: 1, H0024: 1, H0090: 1, H0649: 1, S0142: 1, L0763: 1, L0642: 1, L0764: 1, L0771: 1, L0649: 1, L0651: 1, L0632: 1, L0805: 1, L0790: 1, H0144: 1, H0723: 1, H0682: 1, H0696: 1, H0555: 1, S0028: 1, L0742: 1, L0744: 1 and L0752: 1.			
HOVEN79	HOVEN79R	1708	146 - 265	3883					
HOVEN86	HOVEN86R	1709	1 - 168	3884					
HOVEP45	HOVEP45R	1710	1 - 102	3885					

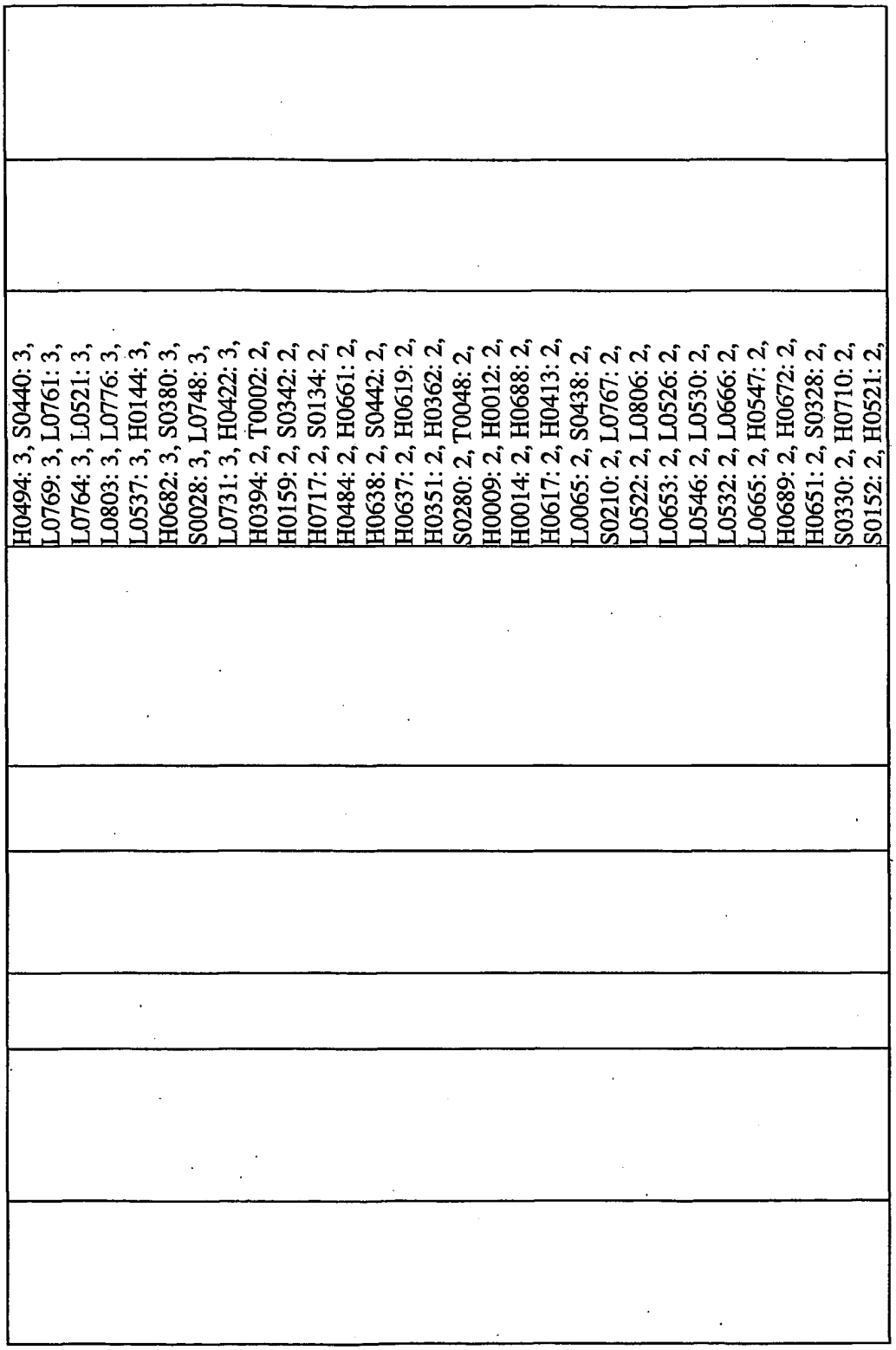
HOVEW80	HOVEW80R	1711	2 - 244	3886				
HOVEY58	HOVEY58R	1712	175 - 405	3887	Lys-5 to Ser-18.	L0803: 7, L0748: 4, L0439: 4, L0804: 3, L0750: 3, L0756: 3, H0024: 2, L0438: 2, L0747: 2, L0779: 2, H0624: 1, H0171: 1, H0661: 1, S0354: 1, H0208: 1, S0300: 1, H0441: 1, H0331: 1, H0013: 1, S0214: 1, H0428: 1, H0040: 1, L0770: 1, L0776: 1, L0809: 1, L0665: 1, H0547: 1, H0658: 1, S0432: 1, L0749: 1, L0777: 1, L0780: 1, L0755: 1 and L0759: 1.		
HOVFD79	HOVFD79R	1713	3 - 152	3888	Val-2 to Ser-7.			
HOVJF86	HOVJF86RA	1714	20 - 130	3889				
HOVJH27	HOVJH27RA	1715	2 - 355	3890				
HOVJI53	HOVJI53R	1716	1 - 396	3891				
HOVJJ09	HOVJJ09R	1717	1 - 576	3892	Ser-5 to Gly-10, Glu-18 to Glu-32, Ala-39 to Lys-46, Ser-89 to Arg-96, Pro-141 to Ala-151, Ser-162 to Gln-169.			
HOVJR56	HOVJR56R	1718	1 - 186	3893	Ala-18 to Ser-24, Gly-55 to Thr-60.			

HOVJU75	HOVJU75R	1719	49 - 684	3894	Tyr-44 to Asp-49, Pro-132 to Leu-139, Cys-168 to His-174.			
HOVJW17	HOVJW17R	1720	74 - 301	3895	Ala-8 to Gln-14, Arg-40 to Glu-45.			
HOVJY68	HOVJY68R	1721	199 - 570	3896	Pro-47 to Lys-53, Leu-93 to Lys-102, Tyr-105 to Gln-110, Arg-115 to Lys-124.			
HOVKB02	HOVKB02R	1722	1 - 366	3897	Ala-1 to His-13, Leu-73 to Leu-79.	L0157: 2, H0620: 2, L0666: 2, S0001: 1, L0717: 1, H0549: 1, S0222: 1, H0581: 1, H0194: 1, H0015: 1, H0399: 1, H0271: 1, H0688: 1, H0428: 1, H0124: 1, L0637: 1, H0672: 1, L0439: 1, L0750: 1 and H0423: 1.		
HOVKE66	HOVKE66R	1723	2 - 487	3898	Ala-20 to Val-38, Cys-43 to Thr-60, Arg-91 to Lys-97.			
HOVKF20	HOVKF20R	1724	1 - 168	3899	Gln-15 to Leu-20, Pro-37 to Thr-44.			
HOVKG18	HOVKG18R	1725	2 - 406	3900	Cys-23 to His-29, Ser-74 to Glu-91.			
HPAMB11	HPAMB11R	1726	323 - 511	3901	Gln-8 to Tyr-14, Pro-20 to Thr-26.			
HPAMB60	HPAMB60R	1727	2 - 586	3902				

HPAMB62	HPAMB62R	1728	2 - 196	3903	Leu-12 to Ser-21.	L0439: 11, L0747: 8, H0624: 6, L0759: 6, L0779: 5, L0758: 5, H0013: 4, L0803: 4, L0754: 4, H0171: 3, L0666: 3, L0756: 3, L0752: 3, L0755: 3, L0591: 3, L0608: 3, H0170: 2, H0650: 2, H0341: 2, H0663: 2, S0360: 2, S0003: 2, L0769: 2, L0796: 2, L0766: 2, L0649: 2, L0806: 2, H0696: 2, S0028: 2, L0740: 2, L0750: 2, L0777: 2, S0436: 2, L0361: 2, S0298: 1, S0418: 1, S0444: 1, S0408: 1, H0733: 1, H0734: 1, S0300: 1, S0220: 1, H0497: 1, H0333: 1, H0270: 1, H0575: 1, H0036: 1, H0590: 1, H0596: 1, H0050: 1, L0471: 1, H0015: 1, S0388: 1, S6028: 1, H0266: 1, H0328: 1, H0622: 1, H0708: 1, H0591: 1, H0040: 1,		

HPAMB93	HPAMB93R	1729	2 - 439	3904		H0087: 1, H0412: 1, H0059: 1, S0112: 1, H0625: 1, S0440: 1, S0150: 1, S0422: 1, L0598: 1, H0529: 1, L0770: 1, L0761: 1, L0646: 1, L0764: 1, L0662: 1, L0768: 1, L0794: 1, L0650: 1, L0774: 1, L0775: 1, L0375: 1, L0659: 1, L0809: 1, L0530: 1, L0664: 1, L0665: 1, S0053: 1, L0438: 1, H0547: 1, H0519: 1, H0682: 1, H0659: 1, H0658: 1, H0660: 1, H0539: 1, S0152: 1, S0044: 1, L0749: 1, L0757: 1, H0445: 1, S0394: 1, L0596: 1, L0594: 1, S0026: 1, S0276: 1, H0543: 1, H0423: 1, S0412: 1 and H0293: 1.			
HPAMC04	HPAMC04R	1730	134 - 334	3905					
HPAMC19	HPAMC19R	1731	8 - 631	3906					
HPAMC27	HPAMC27R	1732	1 - 669	3907					
HPAMC90	HPAMC90R	1733	18 - 464	3908	Arg-1 to Gly-6,		S0360: 15, S0358: 14,		

	Pro-13 to Thr-20.	L0794: 12, L0747: 12, H0696: 11, H0341: 10, H0670: 10, H0657: 9, S0422: 9, H0659: 8, S0114: 7, H0656: 7, S0408: 7, S0007: 7, H0486: 7, H0543: 7, S0444: 6, L0471: 6, S0126: 6, H0658: 6, S0378: 6, S0406: 6, S0027: 6, H0038: 5, H0040: 5, L0770: 5, L0517: 5, H0648: 5, S0404: 5, L0752: 5, H0423: 5, H0624: 4, H0171: 4, H0716: 4, S0116: 4, S0410: 4, H0545: 4, H0373: 4, H0674: 4, L0520: 4, L0763: 4, L0662: 4, L0775: 4, L0493: 4, L0518: 4, L0809: 4, L0519: 4, S3012: 4, H0445: 4, L0361: 4, H0685: 3, T0049: 3, S0420: 3, H0580: 3, S0132: 3, T0109: 3, H0013: 3, S0346: 3, H0597: 3, H0615: 3, H0616: 3, H0087: 3,			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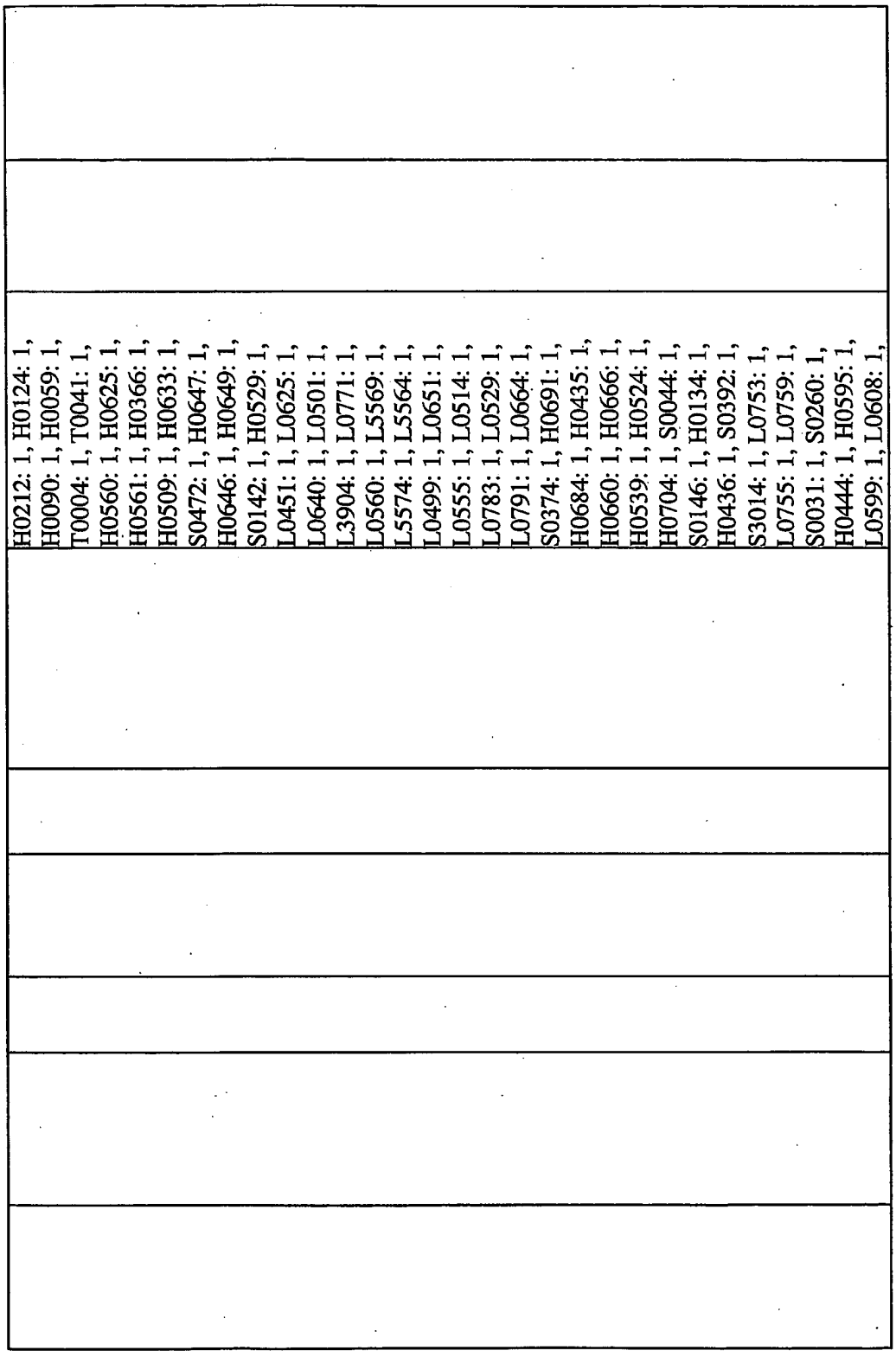
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HPAMD56	HPAMD56R	1734	1 - 504	3909	Glu-10 to Phe-17, Phe-25 to Leu-32, Thr-38 to Tyr-44, Gln-81 to Thr-88.			
HPAME35	HPAME35R	1735	2 - 277	3910	Gly-60 to Phe-66.	L0731: 9, L0653: 8, L0757: 6, L0809: 5, L0747: 5, S0418: 4, S0360: 4, H0188: 4, S0404: 4, L0779: 4, S0040: 3, H0370: 3, H0040: 3, L0774: 3, S0434: 3, S0442: 2, H0575: 2, H0252: 2, S0440: 2, L0374: 2, L0773: 2, H0435: 2, S0406: 2, L0748: 2, L0740: 2, L0754: 2, L0746: 2, L0758: 2, L0581: 2, H0624: 1, H0686: 1, S0180: 1, H0661: 1, S0358: 1, S0476: 1, L0717: 1, H0549: 1, H0455: 1, H0586: 1, H0632: 1, S0280: 1, H0599: 1, H0118: 1, H0235: 1,		

HPAME58	HPAME58R	1736	184 - 492	3911	Lys-1 to Leu-12.	H0597: 1, H0545: 1, T0003: 1, H0510: 1, S0314: 1, H0039: 1, L0194: 1, T0086: 1, H0606: 1, H0032: 1, H0674: 1, H0708: 1, H0598: 1, H0634: 1, H0379: 1, H0413: 1, H0100: 1, S0464: 1, H0509: 1, S0344: 1, L0763: 1, L4497: 1, L0639: 1, L0764: 1, L0771: 1, L0364: 1, L0775: 1, L0806: 1, L0655: 1, L0807: 1, L0657: 1, L0788: 1, L0664: 1, L0665: 1, S0374: 1, H0693: 1, S0126: 1, H0689: 1, H0690: 1, H0682: 1, H0670: 1, H0660: 1, H0672: 1, S0330: 1, S0152: 1, S0390: 1, L0744: 1, L0750: 1, L0780: 1, L0753: 1, H0665: 1, H0667: 1 and S0196: 1.	H0663: 1, L0438: 1 and H0682: 1.		
HPAMF16	HPAMF16R	1737	19 - 513	3912	Glu-1 to Gly-8.				

HPAMF38	HPAMF38R	1738	24 - 449	3913	Ser-35 to Gly-41, Ser-71 to Met-80.	L0752: 12, L0748: 8, L0766: 5, L0599: 5, H0617: 4, L0764: 4, H0081: 3, L0774: 3, L0806: 3, L0776: 3, L0749: 3, L0750: 3, S0444: 2, S0408: 2, H0392: 2, H0150: 2, H0494: 2, H0521: 2, L0756: 2, L0758: 2, H0506: 2, H0352: 2, H0265: 1, H0483: 1, S0358: 1, L0021: 1, H0108: 1, H0024: 1, H0083: 1, S0366: 1, H0090: 1, H0038: 1, H0040: 1, T0041: 1, L0763: 1, L0770: 1, L3905: 1, L0772: 1, L0644: 1, L0645: 1, L0771: 1, L0775: 1, L0651: 1, L0378: 1, L0659: 1, L0666: 1, L0665: 1, L0438: 1, H0519: 1, H0682: 1, H0670: 1, S0188: 1, L0740: 1, L0747: 1, L0777: 1, L0759: 1, H0445: 1, L0596: 1, L0604: 1 and H0542: 1.		

HPAMG44	HPAMG44R	1739	385 - 666	3914					
HPAMG54	HPAMG54R	1740	3 - 410	3915					
HPAMI11	HPAMI11R	1741	2 - 670	3916	Lys-13 to Tyr-30, Arg-52 to Lys-57, Ser-72 to Thr-79, Thr-110 to Trp-115, Leu-124 to Ala-130, Leu-132 to Glu-138, Asn-141 to Lys-162.				
HPAMJ71	HPAMJ71R	1742	2 - 472	3917					
HPAMQ47	HPAMQ47R	1743	100 - 246	3918			L0777: 5, L0766: 3, L0803: 3, L0439: 3, S0360: 2, L0598: 2, L0666: 2, L0748: 2, T0049: 1, S0134: 1, S0116: 1, L0717: 1, H0586: 1, H0486: 1, H0575: 1, H0510: 1, H0553: 1, H0560: 1, S0422: 1, L0763: 1, L0769: 1, L0521: 1, L0767: 1, L0768: 1, L0775: 1, L0663: 1, S0374: 1, L0438: 1, H0520: 1, H0682: 1, S0328: 1, L0740: 1, L0757: 1, S0192: 1 and H0543: 1.		
HPAMQ76	HPAMQ76R	1744	2 - 190	3919	Pro-18 to Lys-24.				
HPAMT47	HPAMT47R	1745	327 - 509	3920	Thr-27 to Lys-37.		S0358: 8, L0777: 6,		

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HPAMU33	HPAMU33R	1746	2 - 520	3921	Lys-59 to Tyr-70, Pro-109 to Lys-115.			
HPAMV82	HPAMV82R	1747	207 - 422	3922	Gln-34 to Asn-39.			
HPAMW44	HPAMW44R	1748	1 - 357	3923	Gly-1 to Arg-13, Glu-37 to Lys-42, Gly-45 to Gln-64.	L0742: 11, L0747: 10, L0769: 9, L0766: 9, L0754: 8, L0751: 7, L0777: 7, L0752: 7, L0806: 6, L0776: 6, L0743: 6, L0717: 4, L0665: 4, L0750: 4, S0360: 3, H0580: 3, H0318: 3, H0052: 3, L0471: 3, H0040: 3, T0042: 3, H0547: 3, H0682: 3, L0745: 3, L0779: 3, L0759: 3, L0593: 3, L0601: 3, H0624: 2, H0556: 2, S0045: 2, H0559: 2, H0013: 2, H0530: 2, H0046: 2, H0620: 2, S0051: 2, T0010: 2,		

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HPAMY45	HPAMY45R	1749	291 - 569	3924	Pro-1 to Cys-6, Ala-13 to Ala-19, His-22 to Lys-28, Ser-44 to Cys-53, Pro-56 to Gly-67.			
HPAMZ14	HPAMZ14R	1750	2 - 628	3925	Trp-19 to Ser-27, Pro-185 to Ser-195.			
HPAMZ15	HPAMZ15R	1751	3 - 149	3926		L0493: 91, L0515: 29, L0509: 25, L0514: 21, L0803: 12, L0508: 8, L0604: 7, H0599: 6, L0809: 5, H0445: 5, L0800: 4, L0511: 4, L0362: 4, H0543: 4,		

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HPAMZ81	HPAMZ81R	1752	3 - 677	3927	Ser-1 to Lys-25, Glu-71 to Ser-77, Glu-93 to Thr-99,			

HPANA05	HPANA05R	1753	2 - 514	3928	Arg-123 to His-134, Pro-141 to His-146, His-198 to Ala-207.			
					Thr-23 to Gln-35, His-37 to Val-51, Arg-70 to Arg-81, Gln-108 to Asp-114, Met-130 to Ser-140.			
HPANA07	HPANA07R	1754	1 - 720	3929	Ala-1 to Thr-6, Lys-19 to Leu-24, Ile-77 to Ala-93, Val-105 to Leu-110, Thr-139 to Thr-153, Thr-165 to Lys-187, Ala-198 to Leu-203, Ser-211 to Lys-226.	H0497: 5, S0002: 5, H0529: 5, H0556: 4, H0046: 3, L0455: 3, T0042: 3, H0520: 3, H0543: 3, H0265: 2, H0657: 2, H0656: 2, H0458: 2, S0358: 2, H0486: 2, H0050: 2, H0124: 2, H0591: 2, H0494: 2, L0662: 2, H0522: 2, L0740: 2, L0751: 2, L0747: 2, L0588: 2, L0605: 2, H0667: 2, H0686: 1, H0650: 1, H0664: 1, H0125: 1, S0418: 1, H0580: 1, S6014: 1, H0257: 1, H0559: 1, H0635: 1, H0427: 1, H0575: 1, H0052: 1, N0006: 1, L0471: 1, H0373: 1, H0083: 1,		

HPANA28	HPANA28R	1755	2 - 376	3930	Gln-22 to Thr-31, Leu-91 to Leu-104.	H0266: 1, S0250: 1, S0022: 1, H0428: 1, H0031: 1, H0383: 1, H0212: 1, S0366: 1, S0036: 1, H0040: 1, H0634: 1, H0561: 1, S0210: 1, L0770: 1, L0761: 1, L0772: 1, L0641: 1, L0644: 1, L0764: 1, L0776: 1, L0655: 1, L0807: 1, L0657: 1, L0665: 1, S0148: 1, S0126: 1, H0682: 1, H0694: 1, S0037: 1, L0744: 1, L0750: 1, L0755: 1, L0731: 1, S0436: 1, L0596: 1, L0485: 1, L0601: 1, S0276: 1, H0423: 1, S0424: 1 and S0446: 1.			
HPANA87	HPANA87R	1756	494 - 730	3931	Gln-13 to Gly-28.				
HPANB32	HPANB32R	1757	2 - 247	3932					
HPANC01	HPANC01R	1758	255 - 446	3933	Leu-1 to Ser-8.				
HPANE49	HPANE49R	1759	2 - 412	3934					
HPANE52	HPANE52R	1760	1 - 666	3935	Lys-64 to Tyr-75, Pro-114 to Lys-120, Leu-160 to Lys-169,				

HPANE87	HPANE87R	1761	119 - 652	3936	Tyr-172 to Gln-177, Pro-182 to Val-189.	L0752: 10, L0593: 9, L0775: 8, L0588: 8, L0666: 7, L0665: 7, L0592: 7, L0595: 7, L0363: 6, L0774: 6, L0747: 6, L0362: 6, H0422: 6, L0455: 5, L0659: 5, H0539: 5, H0170: 4, S0360: 4, L0657: 4, H0547: 4, L0749: 4, L0779: 4, L0757: 4, H0657: 3, H0412: 3, L0520: 3, L0761: 3, L0646: 3, L0375: 3, L0651: 3, L0783: 3, H0144: 3, H0520: 3, H0659: 3, H0670: 3, H0648: 3, L0740: 3, L0750: 3, L0756: 3, L0731: 3, L0759: 3, L0591: 3, L0608: 3, H0662: 2, S0376: 2, H0637: 2, H0619: 2, L0717: 2, S0280: 2, H0318: 2, T0010: 2, H0040: 2, H0413: 2, L0351: 2, H0646: 2, L0763: 2,		

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HPANJ67	HPANJ67R	1762	3 - 119	3937	Ser-5 to Ser-14, Gln-21 to Gln-28.	L0633: 1, L0628: 1, L0517: 1, L0518: 1, L0789: 1, L0663: 1, L0352: 1, H0684: 1, H0435: 1, H0666: 1, S0330: 1, S0378: 1, S0380: 1, S0152: 1, H0134: 1, S0406: 1, H0436: 1, L0612: 1, L0742: 1, L0748: 1, L0751: 1, S0031: 1, L0596: 1, L0485: 1, L0599: 1, L0601: 1, S0026: 1, H0542: 1, H0543: 1 and H0423: 1.			
HPANK61	HPANK61R	1763	170 - 310	3938		H0328: 2, H0674: 2, L0774: 2, L0805: 2, H0682: 2, L0731: 2, H0306: 1, L0770: 1, L0764: 1, L0809: 1, H0520: 1, H0660: 1, H0521: 1, L0744: 1, L0751: 1, L0750: 1, L0752: 1, S0026: 1, H0352: 1 and L0360: 1.			
HPCOB29	HPCOB29R	1764	2 - 139	3939					
HPCOB69	HPCOB69R	1765	47 - 118	3940					
HPCOJ59	HPCOJ59R	1766	3 - 308	3941	Pro-1 to Val-6,	H0659: 2			

HPCOK72	HPCOK72R	1767	197 - 346	3942	Asp-51 to Phe-56, Asp-83 to Gly-88, Ser-94 to Glu-102.				
HPCOK73	HPCOK73R	1768	426 - 557	3943	Ile-12 to Cys-18.	H0591: 62, S0242: 15, L0754: 11, S0003: 9, S0196: 8, L0766: 7, H0144: 6, L0740: 6, L0664: 5, S0420: 4, H0393: 4, L0803: 4, H0428: 3, H0509: 3, H0641: 3, L0777: 3, L0595: 3, L0362: 3, S0360: 2, H0013: 2, L0471: 2, L0163: 2, H0355: 2, H0553: 2, S0036: 2, L0662: 2, L0804: 2, S0374: 2, L0438: 2, S0126: 2, L0748: 2, L0755: 2, L0485: 2, S0412: 2, H0341: 1, S0376: 1, H0580: 1, S0045: 1, H0331: 1, T0039: 1, T0060: 1, H0427: 1, L0021: 1, H0590: 1, H0318: 1, H0194: 1, H0563: 1, H0572: 1, H0051: 1, H0083: 1, S6028: 1, S0312: 1,			

HPCOK93	HPCOK93R	1769	1 - 108	3944		S0214: 1, H0031: 1, H0628: 1, H0598: 1, H0038: 1, H0634: 1, H0616: 1, H0551: 1, H0412: 1, L0370: 1, H0494: 1, H0625: 1, S0440: 1, S0344: 1, H0529: 1, L0770: 1, L0646: 1, L0645: 1, L0648: 1, L0521: 1, L0775: 1, L0525: 1, L0805: 1, L0657: 1, L0782: 1, L0663: 1, L0665: 1, H0547: 1, H0519: 1, H0711: 1, H0659: 1, H0660: 1, H0518: 1, S0152: 1, H0521: 1, L0745: 1, L0759: 1, S0434: 1, L0590: 1, L0592: 1, L0594: 1, H0667: 1, H0423: 1, H0422: 1, S0424: 1 and H0506: 1.		
HPCOL81	HPCOL81R	1770	33 - 179	3945	Lys-42 to Val-49.				
HPCOO90	HPCOO90R	1771	3 - 335	3946	Ala-3 to Gly-9.				
HPCOO95	HPCOO95R	1772	343 - 2	3947	Tyr-12 to Ile-17, Pro-28 to Asn-33, Arg-45 to Asp-53.				
HPCOP23	HPCOP23R	1773	2 - 427	3948					

HPCOQ33	HPCOQ33R	1774	417 - 548	3949				
HPCOQ85	HPCOQ85R	1775	2 - 259	3950			L0803: 8, L0777: 8, L0794: 7, L0766: 7, H0144: 5, L0438: 5, H0547: 5, L0439: 5, H0013: 4, L0779: 4, H0441: 3, S0440: 3, L0762: 3, L0771: 3, L0662: 3, L0666: 3, L0665: 3, L0748: 3, L0752: 3, H0656: 2, H0341: 2, S0418: 2, S0356: 2, H0575: 2, H0328: 2, H0615: 2, H0040: 2, H0477: 2, T0041: 2, L0598: 2, L0763: 2, L0659: 2, L0663: 2, L0664: 2, H0659: 2, L0602: 2, S0406: 2, L0755: 2, L0759: 2, L0592: 2, H0624: 1, H0170: 1, H0171: 1, S0134: 1, H0583: 1, H0650: 1, H0657: 1, L0415: 1, S0116: 1, H0661: 1, H0664: 1, S0420: 1, L0005: 1, S0444: 1, S0360: 1, S0408: 1, S0046: 1, S0476: 1,		

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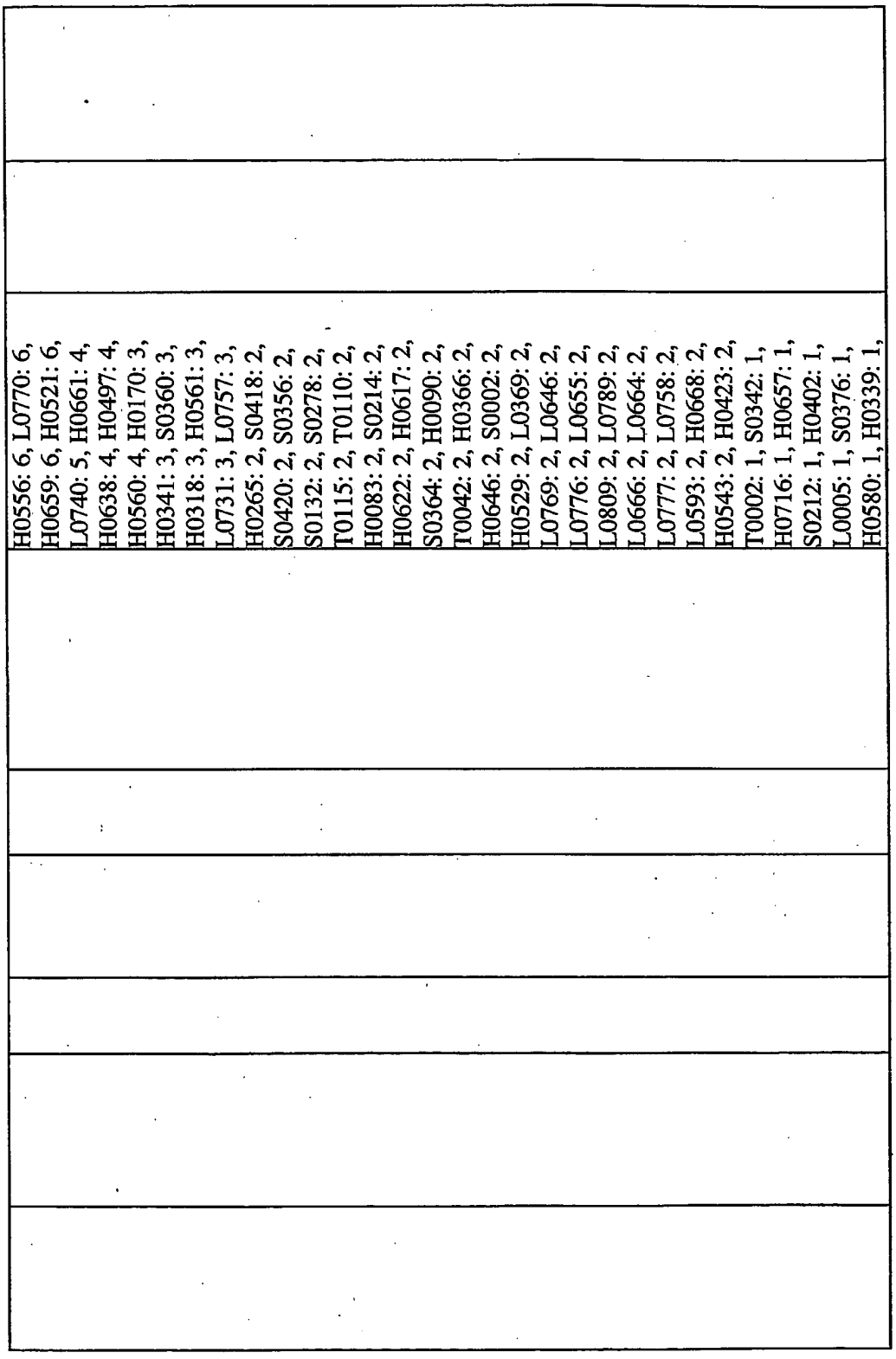
HPCOR41	HPCOQ92R	1776	483 - 641	3951					
	HPCOR41R	1777	133 - 396	3952	Ala-44 to Gly-50.				

HPCOR52	HPCOR52R	1778	43 - 432	3953			
HPCOU70	HPCOU70R	1779	137 - 355	3954		S0414: 16, S0360: 6, S0358: 5, L0766: 5, H0574: 4, H0521: 4, L0754: 4, L0756: 4, S0422: 3, L0770: 3, H0547: 3, H0672: 3, L0596: 3, H0251: 2, H0615: 2, H0090: 2, L0646: 2, L0662: 2, L0776: 2, L0659: 2, L0752: 2, L0758: 2, S0436: 2, L0595: 2, H0624: 1, L0002: 1, H0583: 1, H0650: 1, S0116: 1, S0298: 1, S0282: 1, S0418: 1, H0722: 1, H0734: 1, S0045: 1, S0300: 1, L0717: 1, S0222: 1, H0013: 1, L0021: 1, H0706: 1, L0105: 1, H0263: 1, L0041: 1, H0057: 1, S0050: 1, L0163: 1, H0051: 1, S0388: 1, S0051: 1, H0271: 1, S0003: 1, H0644: 1, H0032: 1, H0673: 1, H0379: 1, H0272: 1, H0059: 1,		

HPCOV35	HPCOV35R	1780	151 - 657	3955	Lys-4 to Lys-16.	H0130: 1, H0647: 1, S0210: 1, S0426: 1, H0529: 1, L0637: 1, L0372: 1, L0649: 1, L0775: 1, L0651: 1, L0806: 1, L0657: 1, L0518: 1, L0788: 1, L0666: 1, L0663: 1, L0665: 1, H0144: 1, L0438: 1, H0519: 1, H0689: 1, H0690: 1, H0659: 1, S0380: 1, H0696: 1, S0406: 1, H0436: 1, H0478: 1, H0727: 1, L0439: 1, L0731: 1, H0595: 1, S0434: 1, L0608: 1, H0667: 1, S0196: 1, H0422: 1, S0424: 1 and H0506: 1.		
HPCOV41	HPCOV41R	1781	3 - 356	3956					
HPCOX43	HPCOX43R	1782	158 - 418	3957	Asn-9 to Trp-14, Pro-20 to Arg-46.				
HPCPB38	HPCPB38R	1783	294 - 473	3958		L0439: 3, L0438: 1, H0659: 1, H0648: 1 and S0330: 1.			
HPCPD26	HPCPD26R	1784	3 - 314	3959					
HPCPE33	HPCPE33R	1785	308 - 427	3960		H0551: 11, L0766: 10, L0794: 8, S0026: 7,			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HPCPH52	HPCPH52R	1788	3 - 101	3963				
HPCPH68	HPCPH68R	1789	191 - 322	3964				
HPCPU27	HPCPU27R	1790	3 - 116	3965	Pro-29 to Gln-38.			
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HPCQO79	HPCQO79R	1793	74 - 256	3968	Thr-19 to Leu-24.	H0659: 2, L0438: 1 and L0439: 1.		
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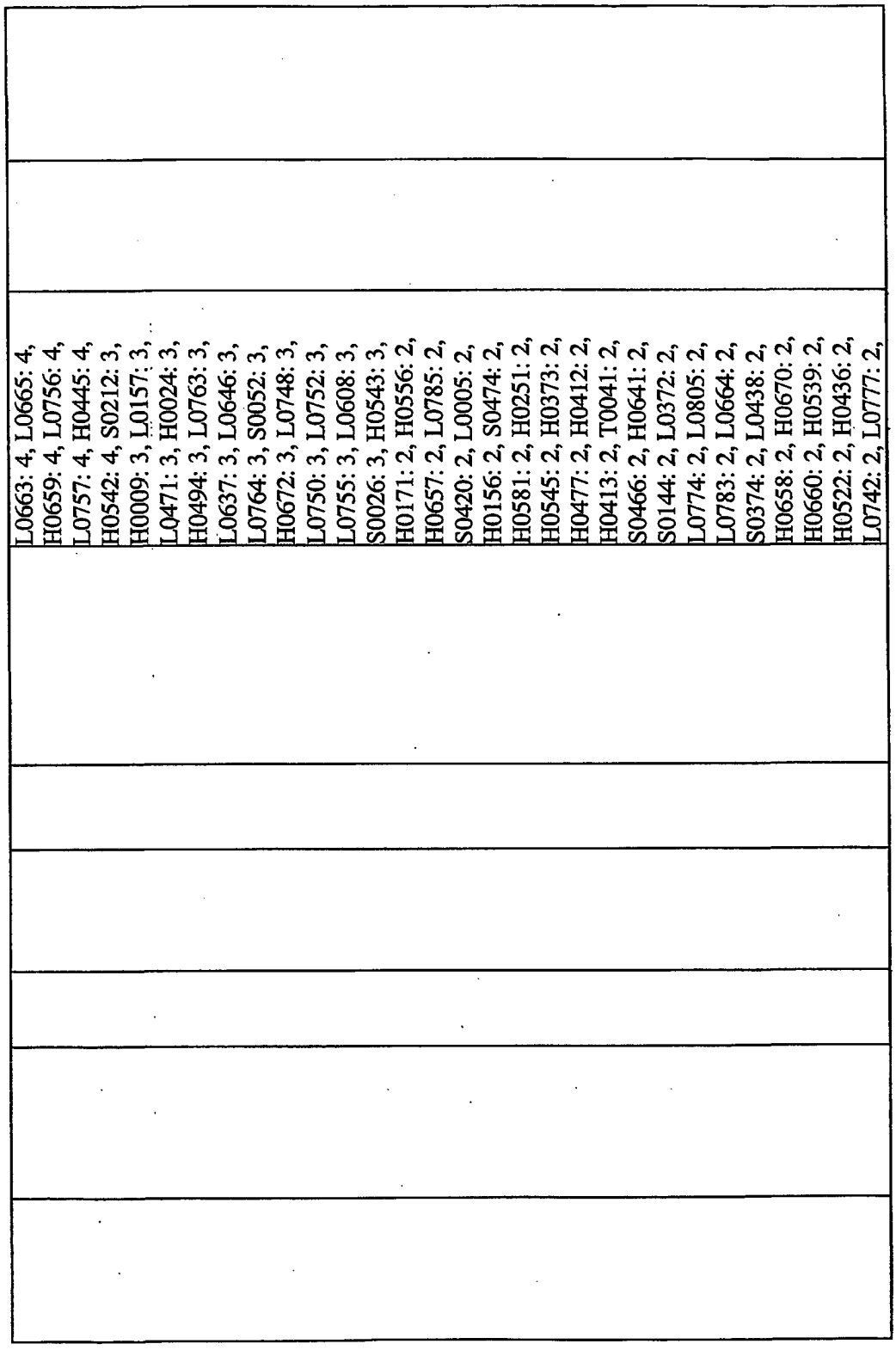
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HPCQT27	HPCQT27R	1796	119 - 265	3971					
HPCQT88	HPCQT88R	1797	1 - 345	3972					
HPCQW64	HPCQW64R	1798	2 - 229	3973	Pro-3 to Cys-9, Asn-28 to Phe-37.				
HPCQW77	HPCQW77R	1799	259 - 408	3974		L0758: 6, L0779: 5, L0766: 4, L0731: 4,			

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HPCQX47	HPCQX47R	1800	174 - 326	3975	Lys-1 to Val-6.		

HPCRN90	HPCRN90R	1801	2 - 109	3976				
HPCTD21	HPCTD21R	1802	228 - 560	3977	Ser-8 to Lys-21, Gln-47 to Glu-52, Arg-72 to Arg-87.			
HPCTD23	HPCTD23R	1803	350 - 760	3978	Met-4 to Lys-18, Gln-44 to Glu-49, Arg-69 to Arg-84.			
HPCTD25	HPCTD25R	1804	269 - 598	3979	Asn-1 to Lys-20, Gln-46 to Glu-51, Arg-71 to Arg-86.			
HPCTD61	HPCTD61R	1805	354 - 713	3980	Asn-1 to Lys-21, Gln-47 to Glu-52, Arg-72 to Arg-87.			
HPCTF29	HPCTF29R	1806	2 - 595	3981				
HPCTF83	HPCTF83R	1807	1 - 177	3982		L0655: 22, H0648: 8, H0638: 4, H0318: 4, L0776: 4, L0659: 4, L0751: 4, L0747: 4, L0599: 4, S0358: 3, L0761: 3, L0775: 3, L0760: 2, H0255: 2, H0663: 2, S0360: 2, H0486: 2, L0142: 2, H0087: 2, L0662: 2, L0378: 2, L0653: 2, L0783: 2, L0666: 2, L0664: 2, L0665: 2, L0743: 2, L0756: 2, L0777: 2, L0362: 2, L0600: 2, H0650: 1,		

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HPCTI39	HPCTI39R	1808	1 - 114	3983					
HPCTI86	HPCTI86R	1809	1 - 306	3984	Lys-37 to Arg-42, Ser-74 to Thr-81.				
HPCTN62	HPCTN62R	1810	341 - 451	3985	Arg-6 to Asp-15.				
HPCTO69	HPCTO69R	1811	23 - 538	3986					
HPCTP60	HPCTP60R	1812	191 - 343	3987		H0052: 3, H0624: 2, H0014: 2, H0375: 2, L0598: 2, L0662: 2, L0803: 2, L0792: 2, L0666: 2, L0664: 2, H0659: 2, L0742: 2, L0743: 2, L0754: 2, H0423: 2, H0171: 1, H0686: 1, S0360: 1, H0486: 1, H0194: 1, L0041: 1, L0471: 1, H0687: 1, H0040: 1, H0264: 1, S0440: 1, S0422: 1, L0761: 1, L0646: 1, L0804: 1,		

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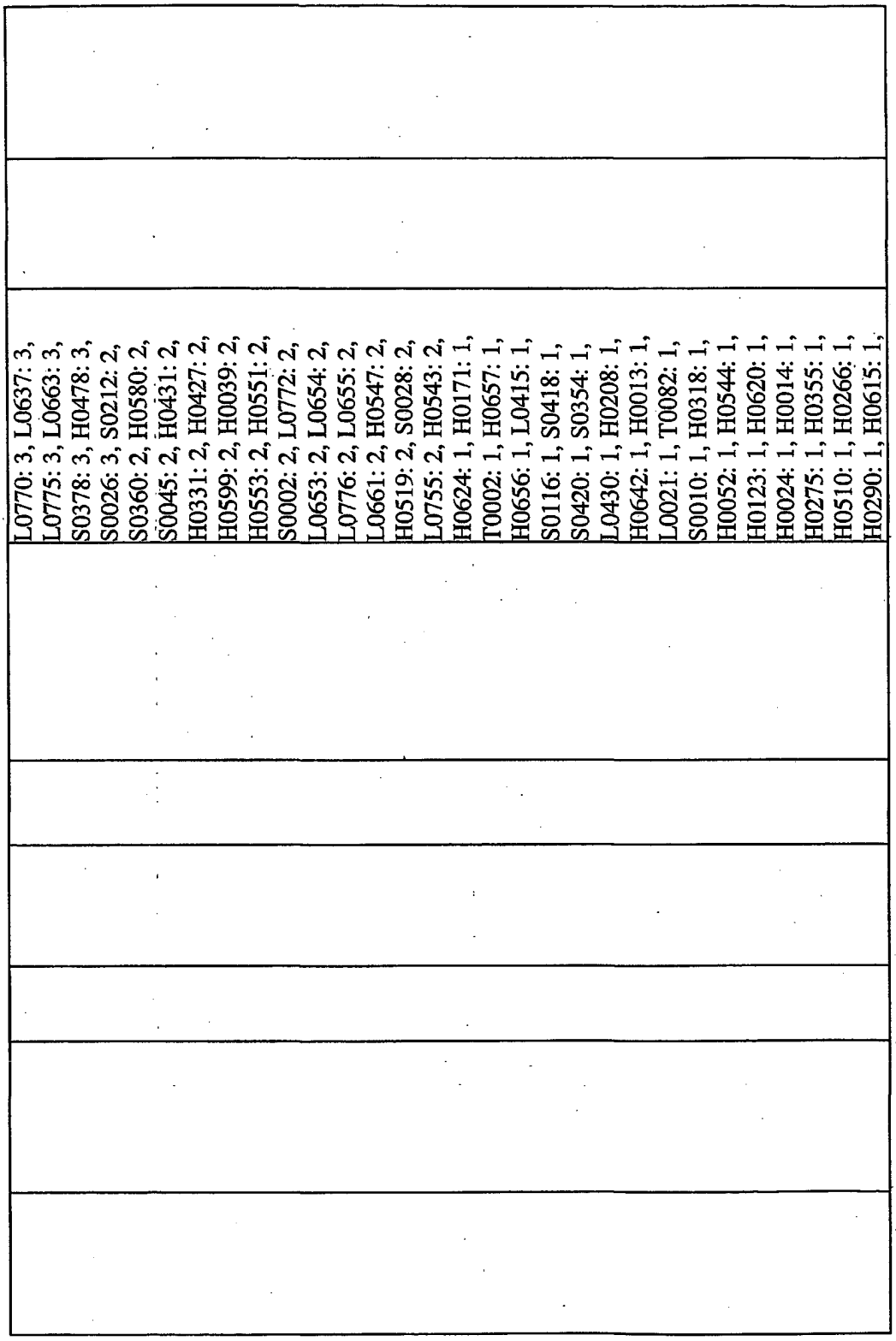
HPCTT47	HPCTT47R	1814	3 - 128	3989	Gly-4 to Lys-9.			
HPCTV40	HPCTV40R	1815	3 - 377	3990				
HPCTV53	HPCTV53R	1816	2 - 274	3991	Pro-7 to Ala-13.			
HPCTV92	HPCTV92R	1817	2 - 205	3992				
HPCTX22	HPCTX22R	1818	1 - 153	3993	Asn-27 to Lys-36.	L0439: 11, L0740: 10, L0752: 10, L0659: 8, L0748: 7, L0005: 6, S0358: 6, L0471: 6, S0214: 6, L0803: 6, L0517: 6, L0666: 6, L0759: 6, L0664: 5, L0665: 5, S0126: 5, H0574: 4, H0156: 4, L0646: 4, L0771: 4, L0766: 4, S0374: 4, H0659: 4, L0754: 4, L0749: 4, L0731: 4, L0362: 4, H0170: 3, H0341: 3, H0632: 3, S0003: 3, H0413: 3, H0529: 3, L0369: 3,		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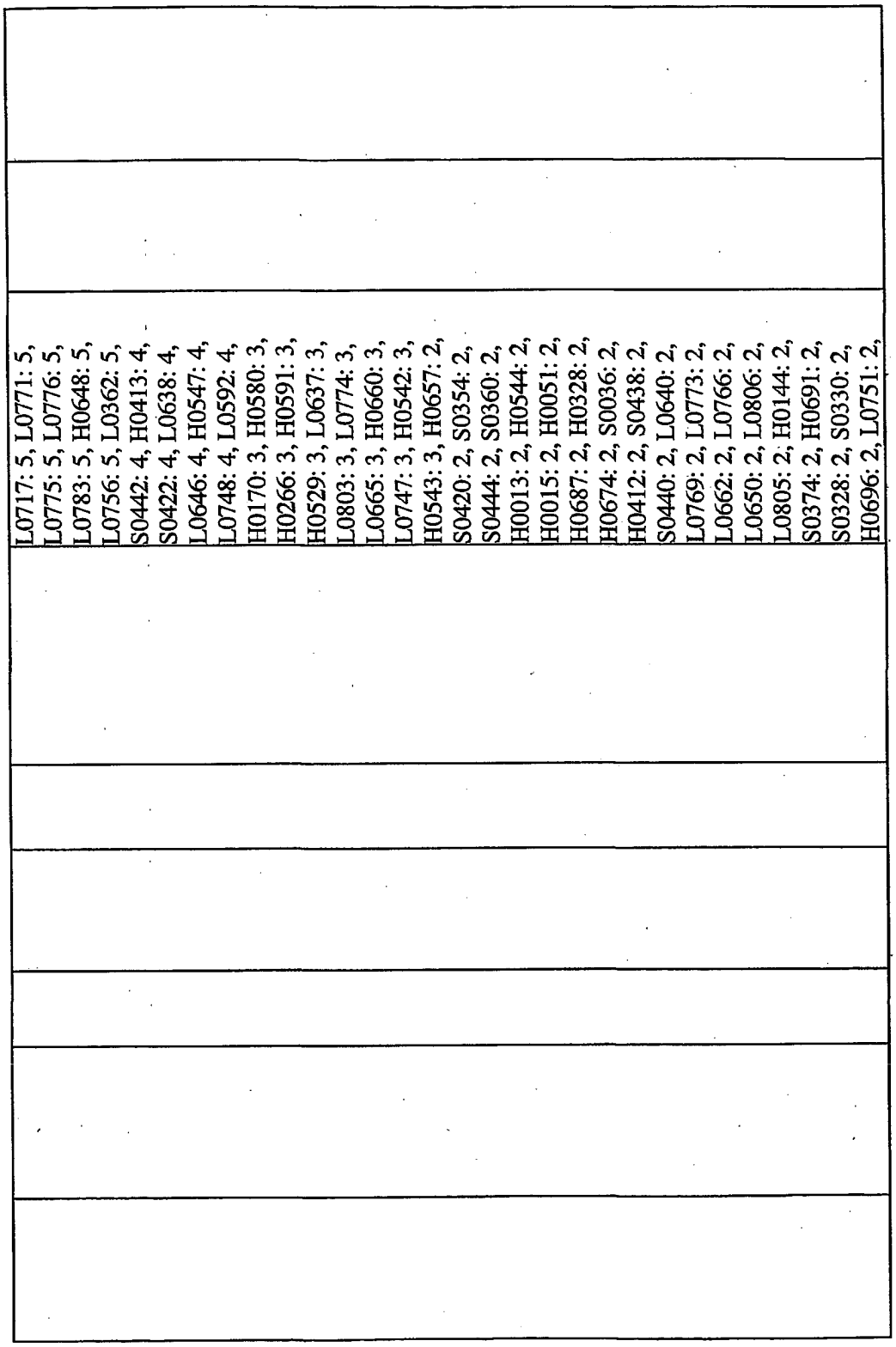
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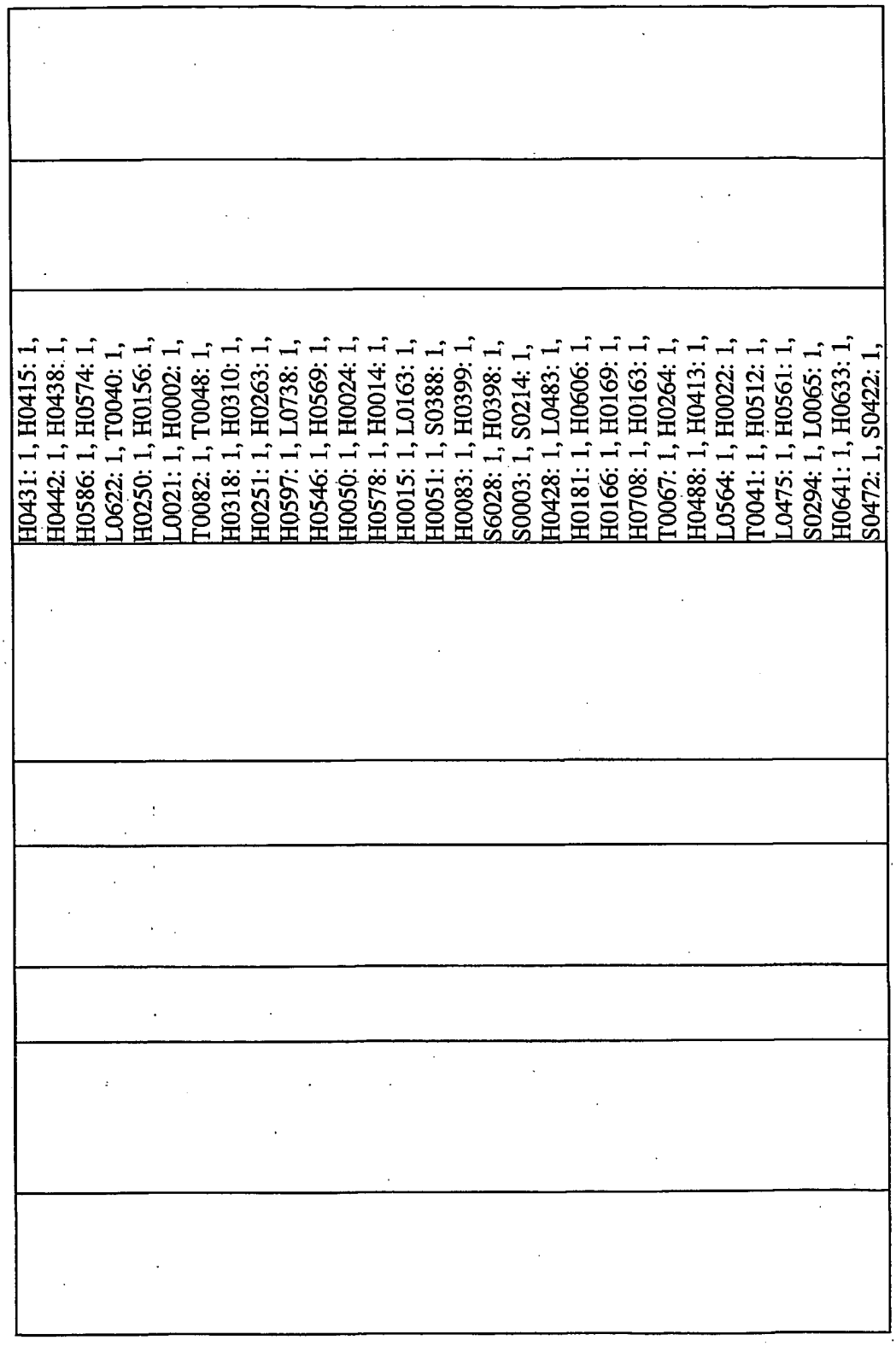
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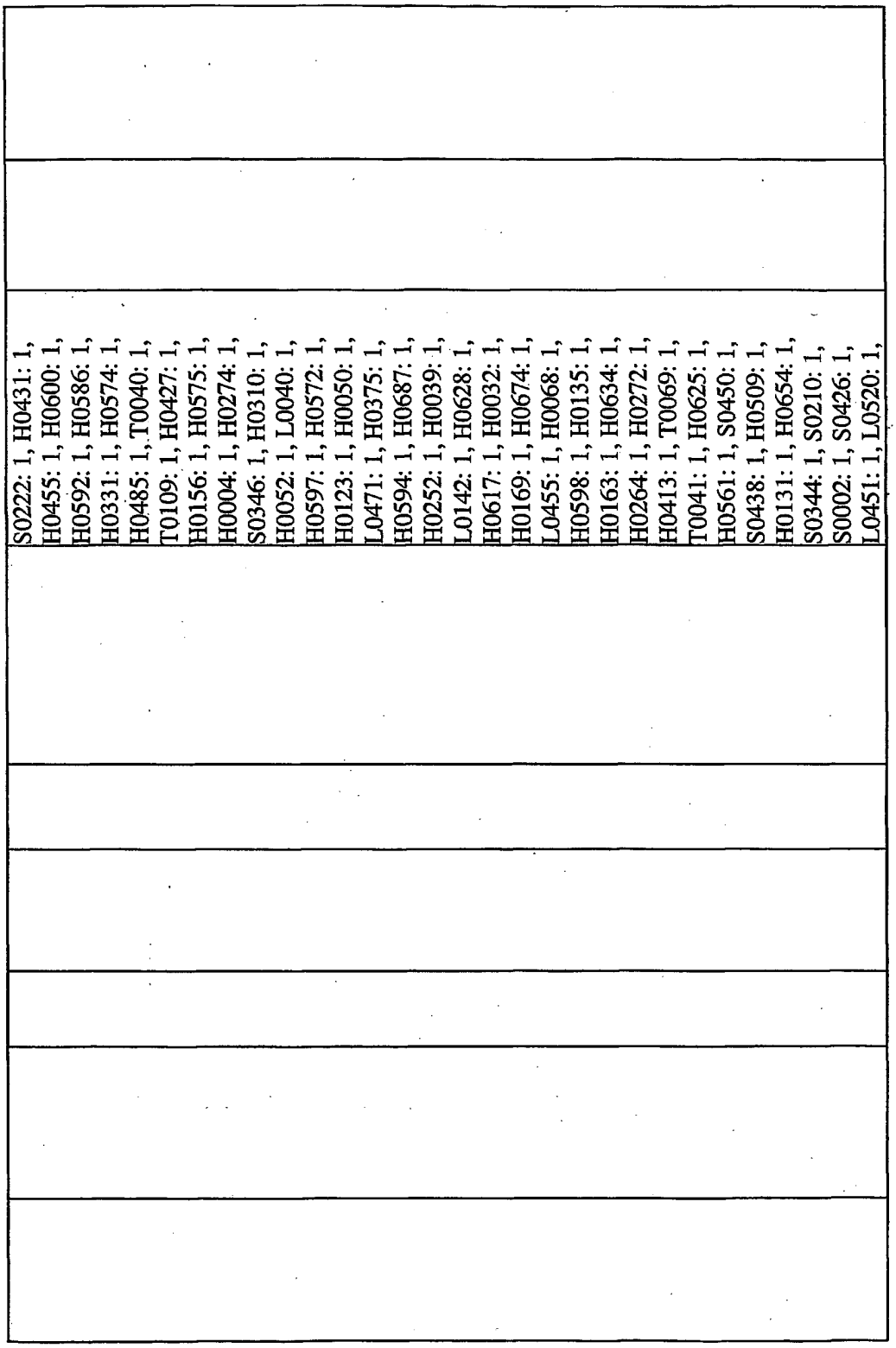
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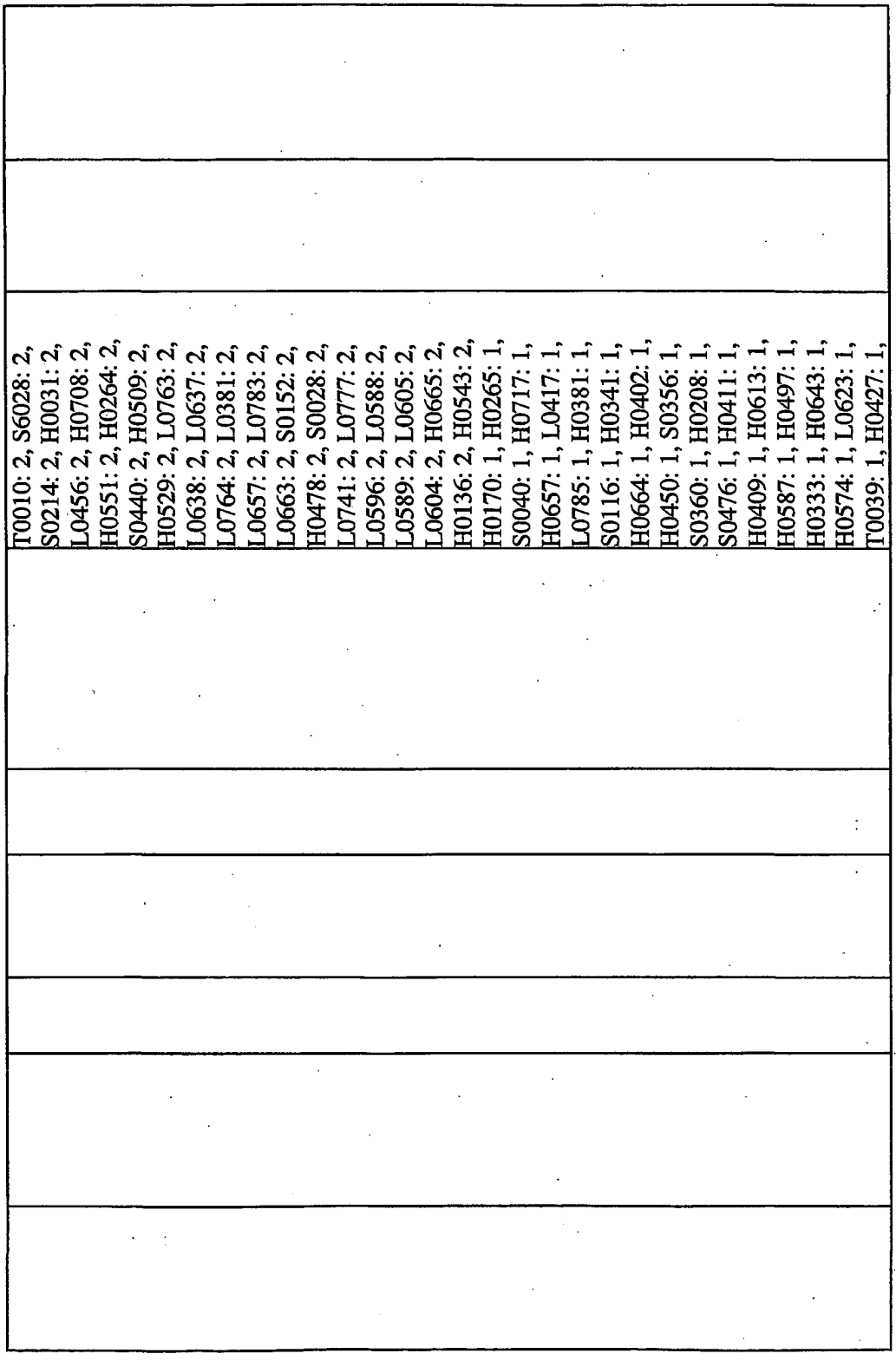
HPDOZ43	HPDOZ43R	1827	1 - 504	4002		L0762: 1, L0763: 1, L0761: 1, L0773: 1, L0768: 1, L0386: 1, L0650: 1, L0375: 1, L0651: 1, L0654: 1, L0776: 1, L0527: 1, L0526: 1, L0518: 1, L0519: 1, L0545: 1, L0787: 1, L4501: 1, S0428: 1, S0216: 1, H0144: 1, H0691: 1, S0148: 1, H0519: 1, H0435: 1, H0658: 1, H0660: 1, H0666: 1, S0330: 1, S0152: 1, S0044: 1, H0479: 1, S0390: 1, S3014: 1, L0744: 1, L0750: 1, L0756: 1, L0752: 1, L0755: 1, L0731: 1, H0707: 1, L0594: 1, L0361: 1, S0026: 1, H0665: 1, S0196: 1, H0422: 1, S0458: 1 and H0506: 1.		
HPDPC65	HPDPC65RA	1828	2 - 178	4003					
HPDPC90	HPDPC90RA	1829	294 - 485	4004	Pro-6 to Gly-35, Arg-41 to Glu-47.				
HPDPH14	HPDPH14R	1830	94 - 291	4005					

HPDPK37	HPDPK37R	1831	1 - 420	4006				
HPDPN83	HPDPN83R	1832	365 - 3	4007		L0784: 2, H0428: 1, H0644: 1, S0366: 1, L0659: 1, L0636: 1, L0789: 1 and H0658: 1.		
HPDPP69	HPDPP69R	1833	260 - 463	4008		L0766: 2 and H0658: 2.		
HPDPQ10	HPDPQ10R	1834	369 - 581	4009	Gln-15 to Arg-20, Arg-35 to Ser-40.			
HPDPQ16	HPDPQ16R	1835	244 - 456	4010	Ile-5 to Lys-20.	L0794: 4, H0351: 3, H0083: 2, H0520: 2, H0658: 2, H0657: 1, H0341: 1, S0358: 1, L0586: 1, L0021: 1, T0110: 1, H0328: 1, H0040: 1, H0616: 1, H0625: 1, S0438: 1, S0440: 1, S0150: 1, H0130: 1, H0641: 1, L0800: 1, L0768: 1, L0803: 1, L0776: 1, L0657: 1, H0660: 1, S0328: 1, S0380: 1, S0406: 1, L0747: 1, H0343: 1, H0136: 1, H0423: 1, H0422: 1 and S0424: 1.		
HPDPR73	HPDPR73R	1836	80 - 463	4011	Asp-28 to His-35, Phe-43 to Trp-48, Asn-81 to Arg-86.			

HPDPS51	HPDPS51R	1837	2 - 214	4012		L0770: 4, L0771: 4, L0769: 3, L0757: 3, L0766: 2, L0779: 2, L0758: 2, H0170: 1, H0686: 1, S0476: 1, H0586: 1, L0637: 1, L0761: 1, L0803: 1, L0774: 1, L0776: 1, L0659: 1, L0809: 1, L0791: 1, H0658: 1, H0696: 1, S3012: 1, S0390: 1, L0747: 1, L0752: 1, L0753: 1, L0759: 1, S0434: 1, L0592: 1 and H0543: 1.		
HPDPS90	HPDPS90R	1838	2 - 421	4013				
HPDPT86	HPDPT86R	1839	378 - 533	4014	Asp-17 to Asn-30.	L0439: 4, H0658: 2, S0474: 1, L0794: 1, L0804: 1, L0791: 1, L0755: 1 and L0599: 1.		
HPDPU66	HPDPU66R	1840	2 - 262	4015				
HPDPX12	HPDPX12RP00B	1841	2 - 418	4016				
HPDPY83	HPDPY83RP00B	1842	148 - 405	4017	Lys-32 to Glu-39, Glu-43 to Ala-50, Ala-52 to Glu-80.			
HPDQC34	HPDQC34R	1843	1 - 693	4018				
HPDQG58	HPDQG58R	1844	2 - 235	4019				
HPDQH11	HPDQH11R	1845	2 - 334	4020				

HPDQH34	HPDQH34R	1846	105 - 308	4021	Gln-12 to Ser-19, Gln-40 to Gln-54.			
HPDQI50	HPDQI50R	1847	3 - 545	4022		H0052: 11, L0439: 10, L0775: 8, H0046: 7, L0748: 7, L0438: 6, L0750: 6, L0666: 5, L0599: 5, S0358: 4, H0620: 4, H0038: 4, H0413: 4, L0369: 4, L0769: 4, L0659: 4, L0665: 4, S0328: 4, L0758: 4, S0418: 3, S0442: 3, S0410: 3, H0619: 3, H0599: 3, L0662: 3, L0768: 3, L0774: 3, L0653: 3, H0660: 3, H0521: 3, L0731: 3, S0434: 3, L0601: 3, S0026: 3, S0424: 3, H0556: 2, T0002: 2, H0295: 2, H0583: 2, H0656: 2, S0376: 2, S0444: 2, H0580: 2, S0045: 2, S0046: 2, S0222: 2, H0592: 2, H0586: 2, N0009: 2, H0013: 2, H0575: 2, H0618: 2, H0318: 2, H0196: 2, H0012: 2, H0373: 2,		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HPDQI70	HPDQI70R	1849	2 - 646	4024				
HPDQL55	HPDQL55R	1850	256 - 711	4025	Pro-5 to Arg-25, Lys-32 to Ser-39, Pro-63 to Pro-79, Pro-115 to His-121.	L0774: 3, L0809: 2, H0483: 1, H0306: 1, H0599: 1, H0618: 1, H0083: 1, H0644: 1, H0617: 1, H0606: 1, H0087: 1, L0369: 1, L0763: 1, L0643: 1, L0662: 1, L0794: 1, L0804: 1, L0790: 1, L0665: 1, H0658: 1, H0696: 1, L0748: 1, L0780: 1 and L0757: 1.		
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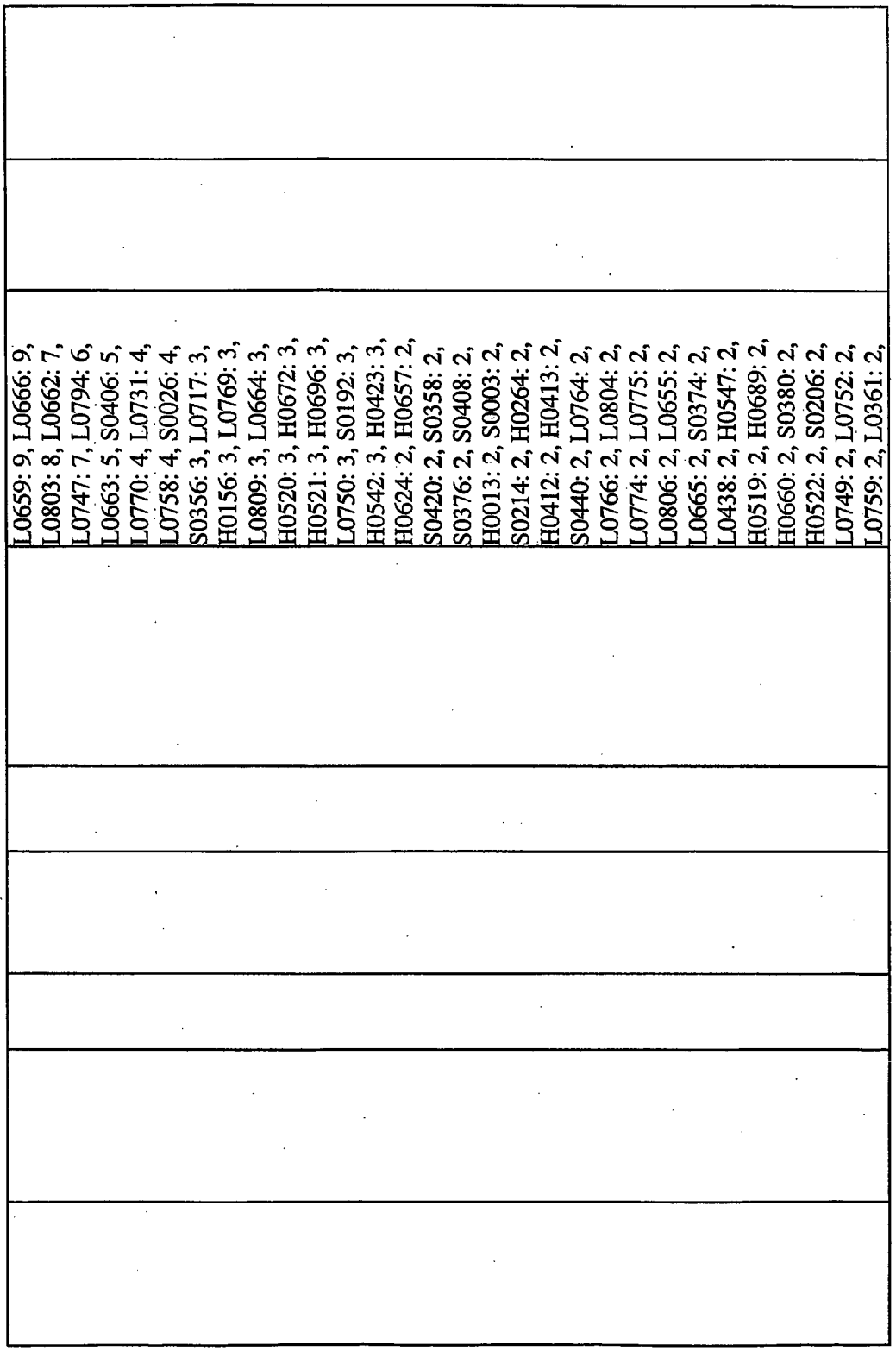
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HPDQR88	HPDQR88R	1852	2 - 550	4027	Gln-121 to Glu-136, Ala-153 to Ser-162, Ala-176 to Ser-182.			
HPDQS14	HPDQS14R	1853	113 - 325	4028				
HPDQS25	HPDQS25R	1854	25 - 273	4029				
HPDQS63	HPDQS63R	1855	25 - 258	4030	Phe-25 to Arg-34, Cys-51 to His-56, Glu-66 to Ser-75.			
HPDQS66	HPDQS66R	1856	134 - 322	4031		H0658: 2, L0745: 2, S0422: 1, H0648: 1 and L0731: 1.		
HPDQS76	HPDQS76R	1857	41 - 175	4032	His-2 to Trp-13, Lys-22 to Cys-31.	L0748: 9, L0774: 3, H0331: 2, H0632: 2, L0526: 2, H0658: 2, L0581: 2, H0574: 1 and L0790: 1.		
HPDQT32	HPDQT32R	1858	3 - 410	4033	Gly-17 to Glu-26, Lys-32 to Leu-37, Phe-46 to Thr-52,	H0542: 11, H0265: 7, H0543: 7, L0751: 5, S0424: 5, H0556: 4,		

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HPDQU81	HPDQU81R	1859	3 - 269	4034	Pro-25 to Thr-32.	L0731: 4, L0775: 3, L0740: 3, H0170: 2, S0426: 2, L0770: 2, L0646: 2, L0766: 2, L0754: 2, H0344: 1, H0295: 1, H0393: 1, H0592: 1, H0318: 1, S6028: 1, H0038: 1, H0551: 1, L0642: 1, L0803: 1, L0774: 1, L0776: 1, L0663: 1, H0658: 1, S0332: 1, L0748: 1, L0777: 1, L0752: 1, L0757: 1, H0445: 1, S0424: 1 and S0384: 1.

HPDQV07	HPDQV07R	1860	2 - 421	4035				
HPDQV49	HPDQV49R	1861	246 - 401	4036				
HPDQW39	HPDQW39R	1862	68 - 550	4037	Asn-20 to Asp-25, Met-75 to Asp-81, Arg-144 to Thr-152.	AR104: 42, AR089: 22, AR060: 7, AR096: 4, AR055: 2, AR061: 1		
HPDQX13	HPDQX13R	1863	113 - 391	4038	Lys-1 to Leu-23, Ala-27 to Ser-34, Gly-36 to Phe-44.			
HPDQY23	HPDQY23R	1864	3 - 476	4039				
HPDQY65	HPDQY65R	1865	3 - 437	4040				
HPDQY88	HPDQY88R	1866	164 - 340	4041				
HPDQY95	HPDQY95R	1867	29 - 430	4042	Leu-11 to Cys-24, Leu-30 to Ser-36, Gly-93 to Glu-99.			
HPDQZ30	HPDQZ30R	1868	212 - 538	4043				
HPDQZ65	HPDQZ65R	1869	3 - 506	4044	Ser-120 to Tyr-126, Gly-137 to Arg-142, Ser-160 to Ser-168.			
HPDRA44	HPDRA44R	1870	1 - 525	4045				
HPDRA50	HPDRA50R	1871	1 - 384	4046				
HPDRF65	HPDRF65R	1872	230 - 559	4047	Glu-1 to Pro-9.			
HPDRG34	HPDRG34R	1873	79 - 270	4048		H0031: 2, H0135: 1, H0272: 1 and H0658: 1.		
HPDRG73	HPDRG73R	1874	2 - 481	4049	Ala-2 to Gly-8.			
HPDRM77	HPDRM77R	1875	1 - 177	4050				
HPDRM93	HPDRM93R	1876	3 - 302	4051				
HPDRO04	HPDRO04R	1877	2 - 307	4052	Gly-1 to Cys-24,			

				Cys-27 to Gly-43, Ala-46 to Trp-54, Ala-56 to Arg-68, Phe-83 to Arg-93.				
HPDRO64	HPDRO64R	1878	249 - 509	4053	Thr-4 to His-17, Ser-21 to Gln-27.	S0132: 1, H0156: 1, H0575: 1, H0551: 1, H0658: 1, H0670: 1, H0555: 1 and L0439: 1.		
HPDRP36	HPDRP36R	1879	3 - 323	4054	Thr-57 to Phe-62, Gly-68 to Phe-73, His-86 to Tyr-92, Asp-97 to Phe-103.	L0766: 11, L0752: 7, L0754: 5, H0547: 4, S0358: 3, S0022: 3, L0756: 3, L0777: 3, H0625: 2, L0065: 2, S0438: 2, L0805: 2, L0776: 2, H0658: 2, S0328: 2, L0740: 2, L0745: 2, L0747: 2, L0750: 2, L0731: 2, L0601: 2, H0542: 2, H0543: 2, H0423: 2, S0424: 2, H0341: 1, H0661: 1, H0664: 1, H0306: 1, H0402: 1, H0638: 1, S0360: 1, H0580: 1, H0645: 1, H0443: 1, H0357: 1, H0592: 1, H0587: 1, H0574: 1, H0486: 1, H0270: 1, H0156: 1, T0048: 1, H0052: 1,		

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HPDRP41	HPDRP41R	1880	2 - 622	4055	Gly-8 to Val-14, Gln-20 to Asp-27, Met-79 to His-88, Arg-171 to Tyr-183, Pro-198 to Gly-204.		
HPDRQ66	HPDRQ66R	1881	27 - 290	4056		L0748: 3, H0556: 2, S0420: 2, S0045: 2, H0171: 1, H0265: 1, S0134: 1, H0657: 1,	

HPDRQ84	HPDRQ84R	1882	1 - 441	4057	Gly-6 to Ser-16, Glu-19 to Ala-33, Glu-44 to Lys-60, Ile-135 to Lys-147.	H0341: 1, S0110: 1, H0661: 1, H0305: 1, H0580: 1, S0007: 1, S0046: 1, S0132: 1, S0278: 1, H0257: 1, H0069: 1, H0575: 1, T0048: 1, H0327: 1, H0252: 1, H0634: 1, H0412: 1, H0059: 1, H0633: 1, S0344: 1, H0529: 1, L0521: 1, L0806: 1, L0805: 1, H0435: 1, H0658: 1, H0672: 1, S0378: 1, L0747: 1, L0599: 1, S0026: 1 and H0542: 1.			
HPDRR71	HPDRR71R	1883	1 - 543	4058	Ala-3 to Lys-11, Gly-112 to Glu-117.				
HPDRS43	HPDRS43R	1884	59 - 211	4059					
HPDRS46	HPDRS46R	1885	3 - 332	4060	Lys-94 to Ser-100.				
HPDRS87	HPDRS87R	1886	2 - 508	4061	Lys-32 to Glu-38, Ser-44 to Ser-55, Gln-67 to Gly-78, Glu-85 to Glu-90, Gly-108 to Ser-114, Phe-149 to Lys-158.				

HPDRT36	HPDRT36R	1887	59 - 214	4062	Lys-25 to Arg-36.	L0754: 19, L0731: 18, H0521: 15, L0777: 11, L0766: 8, L0755: 7, H0581: 6, L0659: 6, L0751: 6, H0486: 5, H0266: 5, H0553: 5, L0662: 5, L0663: 5, H0144: 5, L0439: 5, S0276: 5, H0638: 4, S0360: 4, H0644: 4, S0374: 4, S0330: 4, L0740: 4, L0756: 4, L0599: 4, L0362: 4, H0423: 4, H0657: 3, H0663: 3, H0580: 3, H0575: 3, S0003: 3, H0622: 3, H0124: 3, H0264: 3, H0623: 3, S0002: 3, L0520: 3, L0764: 3, L0775: 3, L0655: 3, L0519: 3, H0519: 3, H0659: 3, H0658: 3, S0328: 3, L0744: 3, L0747: 3, L0759: 3, S0026: 3, S0194: 3, H0624: 2, H0656: 2, H0341: 2, S0354: 2, S0408: 2, S0046: 2, H0619: 2, H0013: 2, H0250: 2,		

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HPDRT37	HPDRT37R	1888	3 - 560	4063	Ala-2 to Asp-9, Arg-18 to Gly-26, Asn-34 to Arg-43, Ala-52 to Asp-57.	L0584: 1, H0542: 1 and S0412: 1.			
HPDRT38	HPDRT38R	1889	2 - 196	4064	Leu-48 to Lys-63.				
HPDRU03	HPDRU03R	1890	2 - 334	4065					
HPDRU37	HPDRU37R	1891	1 - 297	4066	Glu-11 to Pro-16, Arg-46 to Tyr-56, Asp-63 to Asp-69.				
HPDRU71	HPDRU71R	1892	458 - 703	4067					
HPDRV73	HPDRV73R	1893	1 - 528	4068	Glu-54 to Val-64, Leu-97 to Leu-105.				
HPDRV79	HPDRV79R	1894	300 - 596	4069	Ser-14 to Gly-20.	L0794: 6, L0758: 6, L0747: 5, L0770: 4, L0809: 4, H0620: 3, L0764: 3, H0658: 3, H0618: 2, H0012: 2, H0135: 2, L0769: 2, L0771: 2, L0773: 2, L0662: 2, L0803: 2, L0532: 2, S0126: 2, L0756: 2, S6024: 1, S0282: 1, H0638: 1, S0420: 1, L0717: 1, S0222: 1, H0441: 1, H0333: 1, L0622: 1, H0309: 1, H0597: 1, S0388: 1, S0051: 1,			

HPDRW09	HPDRW09R	1895	1 - 231	4070	Ala-31 to Gln-37, Lys-63 to Ser-69.	T0010: 1, H0271: 1, H0687: 1, L0483: 1, H0604: 1, H0030: 1, H0181: 1, H0617: 1, H0412: 1, L0667: 1, L0646: 1, L0800: 1, L0643: 1, L0374: 1, L0364: 1, L0766: 1, L0649: 1, L0804: 1, L0523: 1, L0805: 1, L0655: 1, L0607: 1, L0657: 1, L0559: 1, L0659: 1, L0517: 1, L0529: 1, L0647: 1, L0787: 1, L0789: 1, L0666: 1, L0663: 1, L0665: 1, T0068: 1, L0438: 1, H0670: 1, H0627: 1, L0748: 1, L0439: 1, L0751: 1, L0777: 1, L0731: 1, L0757: 1, S0031: 1, L0605: 1, H0542: 1, H0543: 1, H0423: 1, L0697: 1 and S0462: 1.		
HPDRW51	HPDRW51R	1896	192 - 587	4071				
HPDRY37	HPDRY37R	1897	2 - 322	4072	Pro-3 to Gly-8, Pro-70 to Pro-85.			

HPDRZ11	HPDRZ11R	1898	1 - 354	4073	Arg-13 to Gly-26, Asn-35 to Gln-40.			
HPDRZ29	HPDRZ29R	1899	3 - 509	4074	Val-30 to Trp-36, Ala-53 to Glu-67.	H0457: 9, L0766: 7, H0046: 5, H0650: 4, H0634: 3, L0659: 3, L0439: 3, H0716: 2, H0656: 2, H0254: 2, H0255: 2, H0333: 2, H0253: 2, H0081: 2, H0083: 2, H0628: 2, L0761: 2, L0800: 2, H0658: 2, L0750: 2, H0543: 2, H0422: 2, H0265: 1, H0657: 1, S0001: 1, S0420: 1, S0354: 1, S0376: 1, S0360: 1, H0722: 1, S0045: 1, H0550: 1, S0222: 1, H0614: 1, H0613: 1, H0069: 1, H0427: 1, H0575: 1, H0318: 1, H0581: 1, H0052: 1, H0327: 1, H0545: 1, H0041: 1, H0050: 1, H0354: 1, H0266: 1, H0179: 1, H0428: 1, H0622: 1, S0366: 1, S0036: 1, H0087: 1, H0264: 1, H0488: 1, L0435: 1,		

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HPDVA01	HPDVA01R	1900	774 - 484	4075					
HPDVA06	HPDVA06R	1901	243 - 380	4076					
HPDVB37	HPDVB37R	1902	40 - 315	4077	Pro-2 to Lys-18.		L0748: 10, L0803: 3, L0439: 3, L0751: 3, L0626: 2, L0809: 2, L0790: 2, H0658: 2, L0744: 2, L0740: 2, L0754: 2, L0747: 2, L0756: 2, L0752: 2,		

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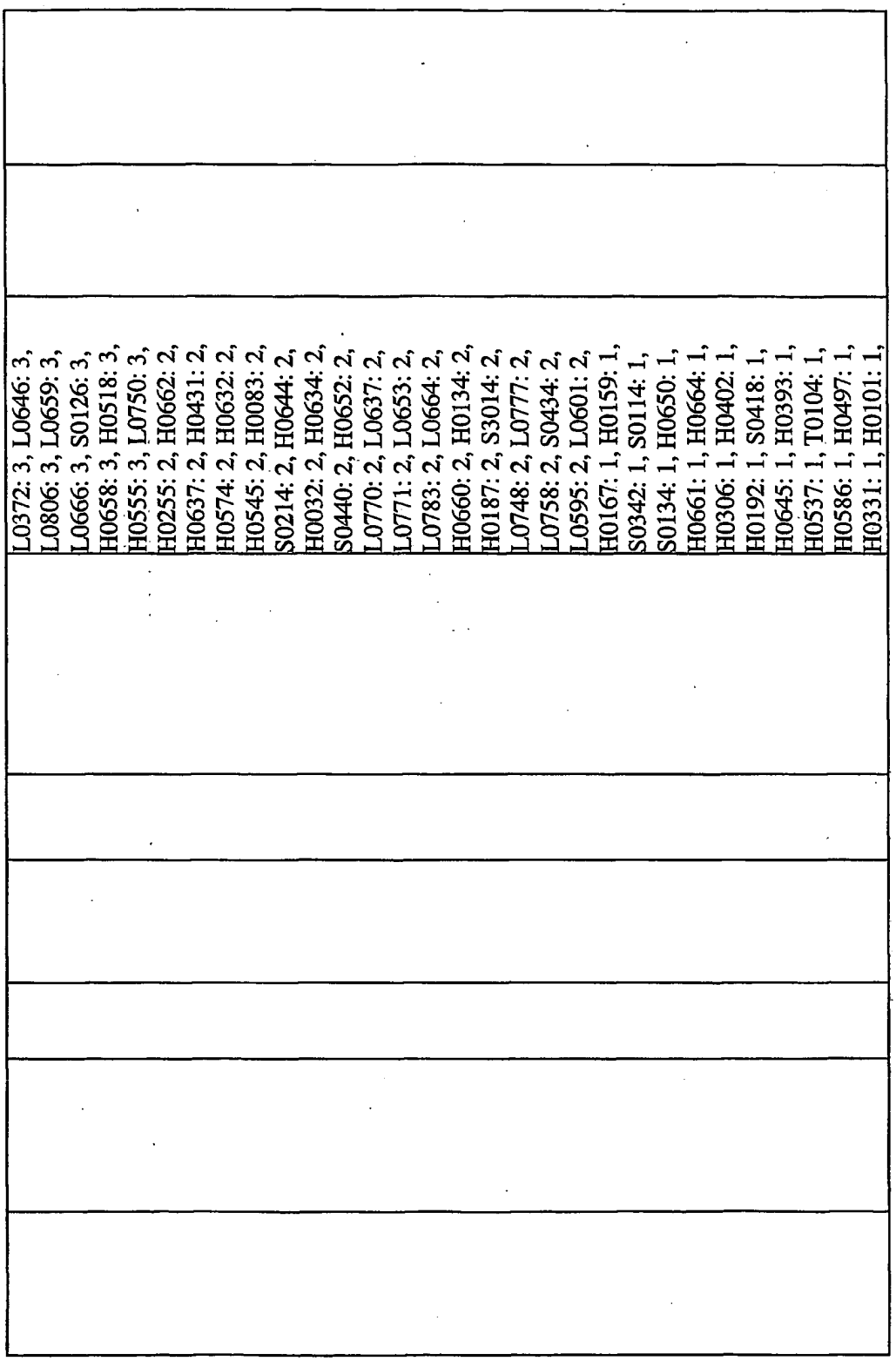
HPDVB70	HPDVB70R	1903	2 - 778	4078				
HPDVC28	HPDVC28R	1904	50 - 136	4079				
HPDVE55	HPDVE55R	1905	89 - 220	4080	Pro-8 to Pro-13.			
HPDVG06	HPDVG06R	1906	3 - 326	4081	Gln-22 to Val-33, Pro-37 to Gly-45, Ser-56 to Thr-65, Arg-82 to Thr-92.			
HPDVG67	HPDVG67R	1907	193 - 450	4082	Glu-79 to Gln-86.			
HPDVI25	HPDVI25R	1908	1 - 510	4083	Met-32 to Lys-37, Asp-44 to Ala-60.			
HPDVI95	HPDVI95R	1909	3 - 338	4084	Ala-32 to Thr-42, Lys-55 to Phe-60, Asp-85 to Gly-90, Arg-95 to Thr-100.			
HPDVK74	HPDVK74R	1910	3 - 425	4085	Ile-20 to Gly-29, Asn-82 to Thr-87.			

HPDVK79	HPDVK79R	1911	61 - 597	4086	Arg-8 to Lys-13, Gly-35 to Lys-42, Ala-48 to Lys-54.			
HPDVK93	HPDVK93R	1912	2 - 697	4087				
HPDVL36	HPDVL36R	1913	8 - 265	4088				
HPDVL45	HPDVL45R	1914	1 - 303	4089	Gly-1 to Phe-8, Pro-39 to Thr-61, Pro-66 to Phe-71, Arg-84 to Pro-89.	H0656: 3, S0218: 1, S0116: 1, S0356: 1, H0586: 1, H0333: 1, H0486: 1, H0427: 1, S0280: 1, H0545: 1, H0135: 1, H0087: 1, H0695: 1, H0547: 1, H0435: 1, H0658: 1, H0670: 1, H0672: 1, H0521: 1, L0439: 1, H0543: 1 and H0423: 1.		
HPDVL52	HPDVL52R	1915	60 - 350	4090	Ala-5 to Val-11, Leu-15 to Lys-23, Lys-39 to Ile-44.	H0656: 1, S0116: 1, S0376: 1, T0110: 1, T0042: 1, H0494: 1, L0649: 1, L0774: 1, L0665: 1, H0658: 1, L0748: 1, L0757: 1, H0667: 1 and H0543: 1.		
HPDVM61	HPDVM61R	1916	101 - 364	4091	Lys-13 to Leu-24, Arg-31 to Pro-54.			
HPDVM63	HPDVM63R	1917	1 - 576	4092	Ala-34 to Thr-46, Asp-59 to Lys-73, Ala-86 to Gln-94, Pro-99 to Gln-109, Glu-129 to Thr-141,			

HPDVM86	HPDVM86R	1918	2 - 406	4093	Asp-160 to Asn-168.	Ala-33 to Cys-41, Thr-58 to Pro-66.	H0521: 43, S0278: 39, S0144: 30, S0142: 26, H0522: 18, S0344: 15, S0002: 14, H0638: 13, H0580: 11, H0641: 10, L0755: 10, L0599: 10, H0250: 9, H0271: 8, H0622: 8, H0575: 7, S0426: 7, L0775: 7, L0776: 7, L0751: 7, L0754: 7, H0125: 6, S0376: 6, S0132: 6, H0069: 6, H0090: 6, S0360: 5, H0486: 5, S0022: 5, L0731: 5, H0584: 4, H0657: 4, S0354: 4, S0358: 4, S0140: 4, H0581: 4, H0674: 4, L0764: 4, L0657: 4, L0665: 4, S0052: 4, S0428: 4, L0749: 4, L0752: 4, H0445: 4, L0591: 4, H0656: 3, L0785: 3, H0663: 3, H0370: 3, H0042: 3, H0004: 3, H0318: 3, H0031: 3, H0059: 3, L0769: 3,		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HPDVO67	HPDVO67R	1919	1 - 465	4094	Glu-1 to Asp-6, Thr-11 to Glu-20, Val-61 to Gln-66.	AR039: 4, AR096: 4, AR052: 2, AR089: 2, AR061: 2, AR060: 2, AR104: 2, AR033: 1, AR055: 1, AR053: 0 L0666: 4, H0253: 2, H0622: 2, H0670: 2, L0743: 2, H0181: 1, L0372: 1, L0773: 1, L0767: 1, L0657: 1, L0665: 1, H0658: 1, L0751: 1, L0749: 1, L0779: 1, L0777: 1, L0758: 1 and L0593: 1.		
HPDVQ74	HPDVQ74R	1920	3 - 278	4095	Pro-1 to Ala-9, Arg-17 to Glu-25.			
HPDVQ82	HPDVQ82R	1921	29 - 421	4096		H0658: 2		
HPDVT30	HPDVT30R	1922	3 - 284	4097		L0754: 2, H0685: 1, T0010: 1, H0658: 1 and H0423: 1.		
HPDVT37	HPDVT37R	1923	1 - 333	4098				
HPDVU28	HPDVU28R	1924	91 - 693	4099	Val-1 to Glu-9, Pro-26 to Gly-31, Tyr-67 to Glu-74,			

HPDVU72	HPDVU72R	1925	3 - 548	4100	Phe-107 to Glu-118, Lys-162 to Arg-173.	Ser-1 to His-7, Thr-15 to Arg-29, His-31 to Val-42, Pro-52 to Pro-94, Glu-113 to Ala-131, Lys-161 to Arg-167.	L0777: 6, L0766: 5, L0749: 5, L0601: 4, L0758: 3, H0617: 2, L0769: 2, L0794: 2, L0805: 2, L0657: 2, L0665: 2, H0693: 2, S0028: 2, L0439: 2, L0751: 2, L0747: 2, L0779: 2, L0588: 2, S0114: 1, H0650: 1, H0657: 1, H0402: 1, H0638: 1, S0354: 1, S0360: 1, S0045: 1, S6026: 1, H0550: 1, H0156: 1, H0253: 1, H0421: 1, T0115: 1, H0150: 1, H0014: 1, S0051: 1, S6028: 1, H0688: 1, L0483: 1, H0181: 1, H0163: 1, H0090: 1, H0087: 1, H0560: 1, H0646: 1, S0210: 1, L0763: 1, L0638: 1, L0761: 1, L0784: 1, L0806: 1, L0776: 1, L0655: 1, L0659: 1, L0384: 1, L0789: 1, H0690: 1,		

HPDVU88	HPDVU88R	1926	3 - 191	4101	Pro-6 to Ala-16.	H0684: 1, H0658: 1, L0752: 1, L0755: 1, L0731: 1, L0757: 1, L0595: 1, S0276: 1 and H0506: 1.			
HPDVV78	HPDVV78R	1927	78 - 644	4102					
HPDWA35	HPDWA35R	1928	3 - 302	4103		H0658: 2			
HPDWA88	HPDWA88R	1929	3 - 560	4104					
HPDWB40	HPDWB40R	1930	175 - 306	4105	Arg-1 to Glu-8, Ala-31 to Trp-39.				
HPDWC30	HPDWC30R	1931	231 - 383	4106					
HPDWC75	HPDWC75R	1932	1 - 390	4107	Ala-3 to Ala-10, Pro-15 to Pro-23, Glu-79 to Ser-88, Pro-115 to Arg-122.				
HPDWD44	HPDWD44R	1933	214 - 471	4108		H0271: 13, H0436: 11, L0766: 8, H0581: 5, L0754: 5, S0242: 5, H0556: 4, H0635: 4, L0800: 4, L0662: 4, L0804: 4, L0655: 4, L0659: 4, L0789: 4, L0751: 4, L0757: 4, L0591: 4, S0356: 3, H0069: 3, H0416: 3, L0803: 3, L0747: 3, H0445: 3, H0423: 3, H0422: 3, H0395: 2,			

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HPDWD67	HPDWD67R	1934	220 - 2	4109	Asp-65 to Gly-73.			
HPDWD69	HPDWD69R	1935	3 - 353	4110	Ser-1 to His-19, Val-86 to Pro-105, Pro-110 to Met-117.	L0588: 18, S0408: 16, S0007: 12, S0444: 11, H0677: 11, H0648: 10, L0769: 9, H0670: 9, S0328: 9, H0651: 8, S0406: 8, H0657: 7, H0341: 7, H0402: 7, H0659: 7, L0748: 7, H0543: 7, T0049: 6, H0251: 6, L0775: 6, L0742: 6, H0422: 6, L0471: 5, H0617: 5, S0440: 5, L0517: 5, S0374: 5, H0658: 5, H0696: 5, L0749: 5, H0423: 5, H0295: 4, S0114: 4, S0134: 4,		

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HPDWD81	HPDWD81R	1936	1 - 378	4111	Asn-60 to Gly-72, Pro-83 to Trp-114, Ser-117 to Arg-126.	L0807: 1, L0542: 1, L0519: 1, L0530: 1, L0790: 1, L0663: 1, H0144: 1, H0724: 1, H0660: 1, H0666: 1, H0672: 1, H0518: 1, H0521: 1, S0190: 1, H0134: 1, H0187: 1, H0436: 1, S3014: 1, S0028: 1, L0751: 1, L0779: 1, L0757: 1, S0031: 1, H0445: 1, S0436: 1, H0668: 1, S0026: 1, S0276: 1 and S0424: 1.		
HPDWE11	HPDWE11R	1937	2 - 121	4112	Arg-1 to Gln-9.			
HPDWE64	HPDWE64R	1938	248 - 559	4113		H0575: 2, L0002: 1, S0336: 1, H0487: 1, L0762: 1, L0637: 1, L0805: 1, L0659: 1, H0658: 1, L0777: 1 and L0731: 1.		
HPDWF93	HPDWF93R	1939	1 - 507	4114	Pro-3 to Pro-12.			
HPDWG51	HPDWG51R	1940	169 - 342	4115	Phe-1 to Cys-13, Gly-28 to Ser-35.	H0038: 5, H0616: 3, L0752: 3, S0418: 2, H0620: 2, H0547: 2, L0602: 2, H0521: 2,		

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HPDWL56	HPDWL56R	1941	2 - 388	4116					
HPDWL70	HPDWL70R	1942	174 - 308	4117					
HPDWN46	HPDWN46R	1943	1 - 585	4118	Arg-21 to Gly-32, Pro-63 to Ser-79, Thr-92 to Pro-100, Glu-107 to Glu-126, Glu-133 to Ser-146, Ser-148 to Thr-157.	H0556: 30, H0659: 9, L0439: 9, S0406: 8, H0494: 7, S0360: 6, L0771: 6, H0634: 5, S0206: 5, L0777: 5, H0265: 4, H0657: 4, S0328: 4, S0152: 4, S0146: 4, L0748: 4, L0751: 4, L0749: 4, H0423: 4, S0040: 3, H0497: 3, H0623: 3,			

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HPDWN65	HPDWN65R	1944	1 - 246	4119					
HPDWN69	HPDWN69R	1945	2 - 607	4120	Gly-2 to Pro-9, Ser-24 to Thr-33.				
HPDWO08	HPDWO08R	1946	351 - 704	4121			L0766: 5, H0551: 3, L0769: 3, L0639: 3, H0327: 2, S0002: 2, L0764: 2, L0659: 2,		

HPDWO29	HPDWO29R	1947	386 - 568	4122	His-1 to Gly-13.	L0663: 2, L0777: 2, S0356: 1, S0360: 1, S0410: 1, L0717: 1, H0261: 1, H0550: 1, S0222: 1, T0109: 1, H0575: 1, T0048: 1, H0052: 1, S0051: 1, L0455: 1, H0124: 1, H0135: 1, H0063: 1, H0087: 1, L0763: 1, L0770: 1, L0796: 1, L0761: 1, L0643: 1, L0374: 1, L0771: 1, L0626: 1, L0635: 1, L0542: 1, L0809: 1, L0665: 1, L0565: 1, H0547: 1, H0658: 1, H0522: 1, L0756: 1, L0758: 1 and L0366: 1.			
HPDWO50	HPDWO50R	1948	27 - 455	4123	Arg-90 to Lys-95, Pro-121 to Trp-129.				
HPDWO61	HPDWO61R	1949	2 - 358	4124					
HPDWO82	HPDWO82R	1950	1 - 342	4125	Ala-3 to Glu-8.	L0770: 12, H0657: 10, H0659: 9, L0776: 8, H0648: 8, L0755: 8, L0774: 7, S0410: 6, H0494: 6, L0769: 6, L0750: 6, S0408: 5, S0440: 5, L0775: 5,			

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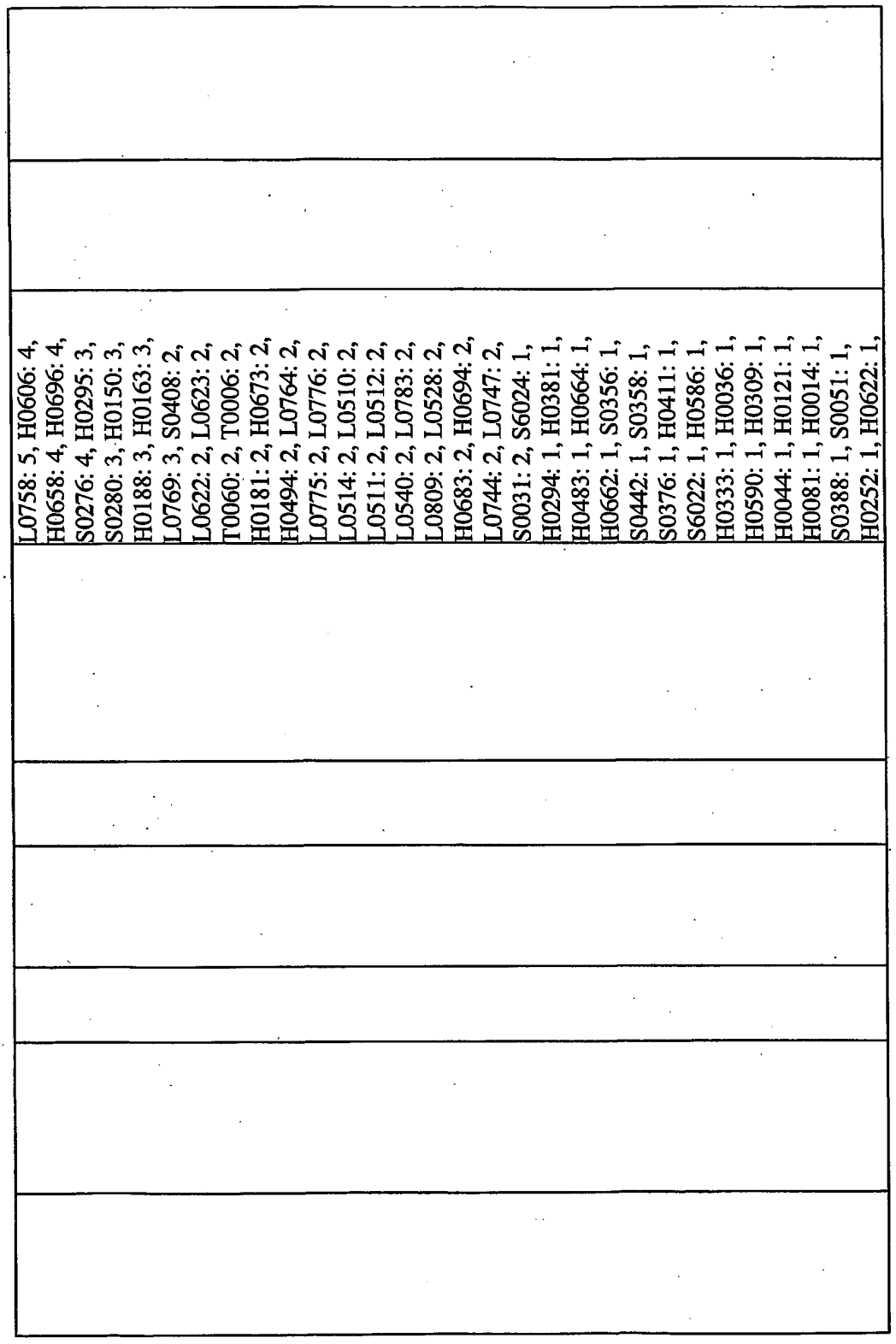
HPDWS61	HPDWS61R	1951	73 - 321	4126	Asp-15 to Val-20.		H0617: 8, S0404: 8, H0484: 7, H0550: 7,	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T0060: 2, T0006: 2,
H0181: 2, H0673: 2,
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HPDWT55	HPDWT55R	1952	3 - 503	4127	Ala-37 to Ser-42, Gly-127 to Thr-134.	L0774: 3, H0658: 3, L0803: 2, L0439: 2, H0619: 1, H0586:-1, H0309: 1, S0366: 1, L0659: 1 and S0052: 1.		
HPDWT56	HPDWT56R	1953	12 - 746	4128	Arg-4 to Gly-17, Pro-39 to Lys-46, His-96 to Arg-102.			
HPDWU47	HPDWU47R	1954	1 - 705	4129				
HPDWU55	HPDWU55R	1955	1 - 702	4130	Leu-4 to Phe-9, Gly-29 to Glu-39.	L0748: 18, L0755: 7, H0251: 6, L0777: 6, H0658: 4, L0754: 4, L0779: 4, S0360: 3, S0276: 3, H0674: 2, L0767: 2, L0766: 2,		

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	Pro-50 to Trp-55.	4131				
		2 - 568				
		1956				
	HPDWU60R					
HPDWU60	L0766: 7, L0748: 6, L0771: 5, S0422: 3, H0519: 3, L0749: 3, L0756: 3, H0735: 2, H0641: 2, H0529: 2, L0659: 2, S0374: 2, L0758: 2, H0484: 1, S0442: 1, S0358: 1, S0410: 1, S0007: 1, H0632: 1, L0483: 1, H0606: 1, H0268: 1, S0150: 1, L0763: 1,					

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HPDWU63	HPDWU63R	1957	2 - 370	4132	Ala-51 to Tyr-56, Ala-92 to Ser-101, Ser-118 to Ile-123.		
HPFMP90	HPFMP90R	1958	38 - 163	4133	Asp-14 to Ala-19.	L0740: 3, L0758: 3, S0242: 3, L0598: 2, L0766: 2, L0803: 2, H0435: 2, H0648: 2, L0748: 2, L0756: 2, L0731: 2, L0757: 2, H0170: 1, S0300: 1, H0431: 1, H0046: 1, H0687: 1, S0003: 1, H0674: 1, H0616: 1, T0067: 1, UNKWN: 1, L0770: 1, L0637: 1, L0373: 1, L0765: 1, L0794: 1, L0804: 1,	

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HPIAL09	HPIAL09R	1959	209 - 394	4134	Phe-5 to Leu-11, Ser-20 to Arg-45.			
HSAMY44	HSAMY44R	1960	3 - 182	4135	Gly-4 to Asn-9.			
HSAYW59	HSAYW59R	1961	2 - 364	4136	Pro-11 to Lys-16, Val-18 to Arg-45, Asn-56 to Glu-67.	H0255: 2, S0114: 1, L0510: 1 and S0216: 1.		
HSCPJ17	HSCPJ17R	1962	2 - 655	4137				
HSDIA22	HSDIA22R	1963	114 - 212	4138				
HSDII65	HSDII65R	1964	239 - 412	4139		L0809: 5, L0666: 4, L0747: 3, L0750: 3, L0764: 2, L0803: 2, L0774: 2, L0651: 2, L0663: 2, L0664: 2, L0748: 2, L0756: 2, L0779: 2, L0755: 2, H0669: 1, H0392: 1, H0600: 1, S0346: 1, H0494: 1, H0646: 1, L0763: 1, L0371: 1, L0372: 1, L0775: 1, L0659: 1, L0518: 1, L0788: 1, L0665: 1, S0330: 1, S0392: 1,		

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HSDIX73	HSDIX73R	1965	2 - 187	4140				
HSDJI25	HSDJI25R	1966	2 - 169	4141	Ser-20 to Ser-31.			
HSDZE12	HSDZE12R	1967	40 - 141	4142	Trp-1 to Ala-10.	AR033: 4, AR089: 3, AR096: 3, AR060: 3, AR061: 2, AR053: 2, AR055: 1, AR039: 0, AR052: 0 L0774: 3, L0752: 3, L0592: 3, H0625: 2, L0662: 2, L0747: 2, L0777: 2, H0580: 1, L0717: 1, H0455: 1, S0280: 1, H0251: 1, H0633: 1, L0773: 1, L0768: 1, L0794: 1, L0803: 1, L0775: 1, L0653: 1, L0776: 1, L0661: 1, L0659: 1, L0526: 1, L0809: 1, L0665: 1, H0658: 1, H0696: 1, L0755: 1, L0731: 1, L0757: 1, L0759: 1 and H0352: 1.		
HSDZJ21	HSDZJ21R	1968	40 - 180	4143	Lys-18 to Lys-30.			
HSIFF84	HSIFF84R	1969	3 - 80	4144	Pro-14 to Lys-26.			
HSKJR50	HSKJR50R	1970	2 - 400	4145	Leu-117 to Trp-123.			

HSLHT27	HSLHT27R	1971	2 - 196	4146	Asn-45 to Ser-54.			
HSODB16	HSODB16R	1972	1 - 174	4147		H0596: 5, S0388: 4, H0598: 4, H0595: 4, S0412: 4, S0282: 3, S0280: 2, H0594: 2, H0366: 2, H0542: 2, H0395: 1, H0589: 1, S0356: 1, H0411: 1, H0592: 1, H0559: 1, H0427: 1, S0050: 1, H0373: 1, S0344: 1, H0436: 1, S0260: 1, S0194: 1 and H0506: 1.		
HSPSB24	HSPSB24R	1973	1 - 612	4148	Glu-77 to Arg-82, Pro-132 to Met-139.			
HSPSB70	HSPSB70R	1974	3 - 539	4149	Ile-1 to Ala-11, Asp-67 to Leu-78, Asn-81 to Ser-90, Pro-96 to Glu-110, Ala-164 to Ala-171, Gln-173 to Lys-179.			
HSPSB74	HSPSB74R	1975	1 - 162	4150	Ala-1 to Cys-21, Trp-23 to Ser-33.			
HSPSB80	HSPSB80R	1976	2 - 631	4151				
HSPSC30	HSPSC30R	1977	1 - 342	4152	Leu-43 to Thr-58.			
HSPSE86	HSPSE86R	1978	3 - 293	4153	Ser-41 to Ile-50, Gln-55 to Glu-65, Cys-69 to Asp-78.	L0755: 5, L0748: 4, H0616: 3, L0769: 3, L0752: 3, L0731: 3, L0757: 3, S0356: 2, S0408: 2, S0046: 2,		

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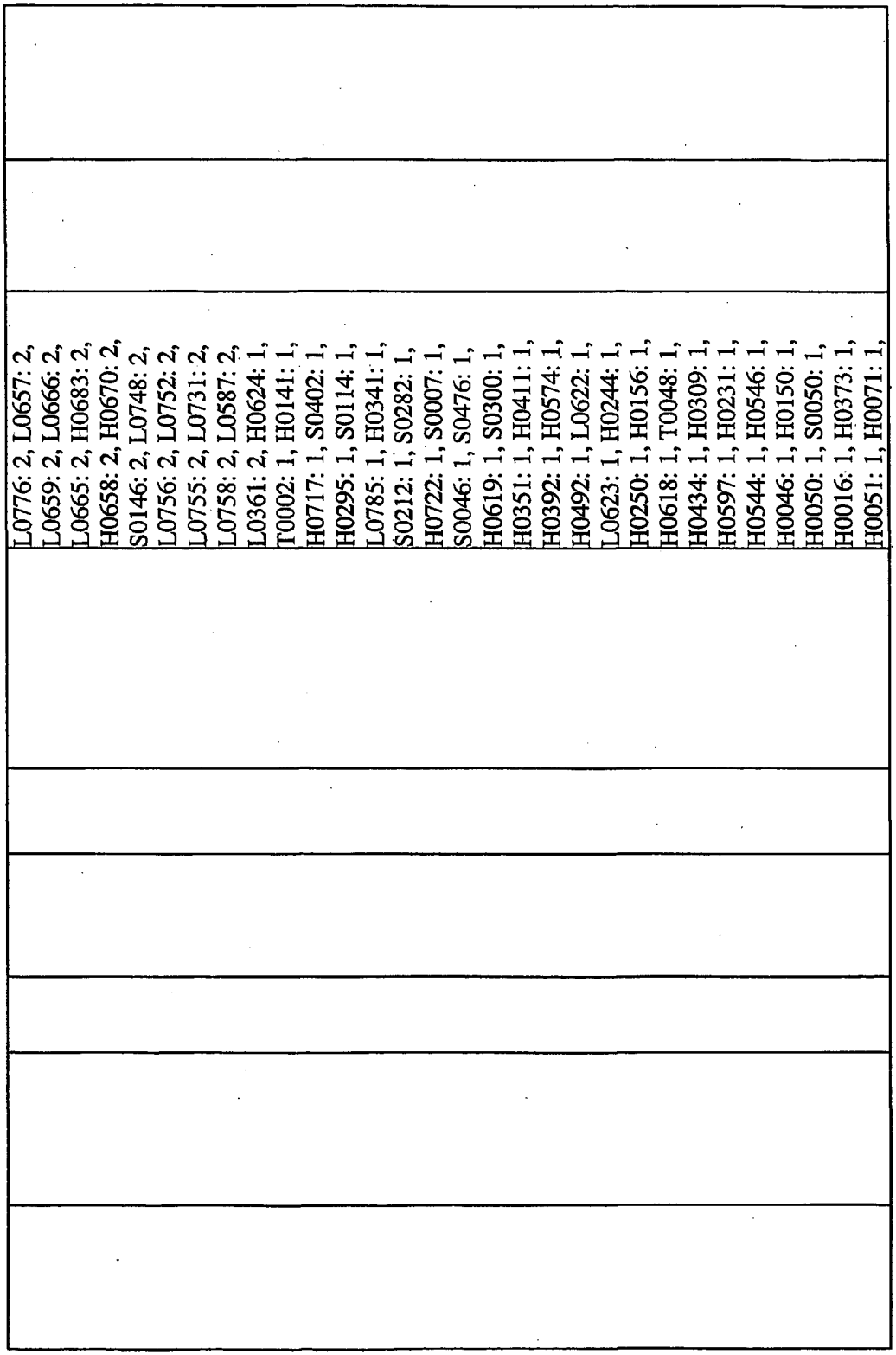
HSPSG03	HSPSG03R	1979	3 - 191	4154	Leu-41 to Asp-48.	H0124: 19, H0052: 10, L0751: 7, L0747: 7, H0255: 6, H0441: 6, H0556: 5, S0222: 5, H0265: 4, S0360: 4, H0620: 4, L0655: 4, H0144: 4, L0439: 4, L0596: 4, L0601: 4, S0132: 3, H0575: 3, H0123: 3, H0012: 3, H0024: 3, H0617: 3, H0087: 3, H0529: 3, L0764: 3, L0662: 3, L0766: 3, L0663: 3, L0565: 3, L0438: 3, H0660: 3, L0743: 3, L0740: 3, H0445: 3, H0218: 2, H0585: 2, S0418: 2, S0444: 2, S0408: 2, H0208: 2, S0278: 2, H0261: 2, H0333: 2, H0706: 2, H0581: 2, S0049: 2, H0009: 2, L0471: 2, S0051: 2, T0010: 2, H0083: 2, H0594: 2, T0006: 2, H0628: 2, H0038: 2, S0440: 2, S0142: 2, S0344: 2, L5565: 2, L5566: 2,		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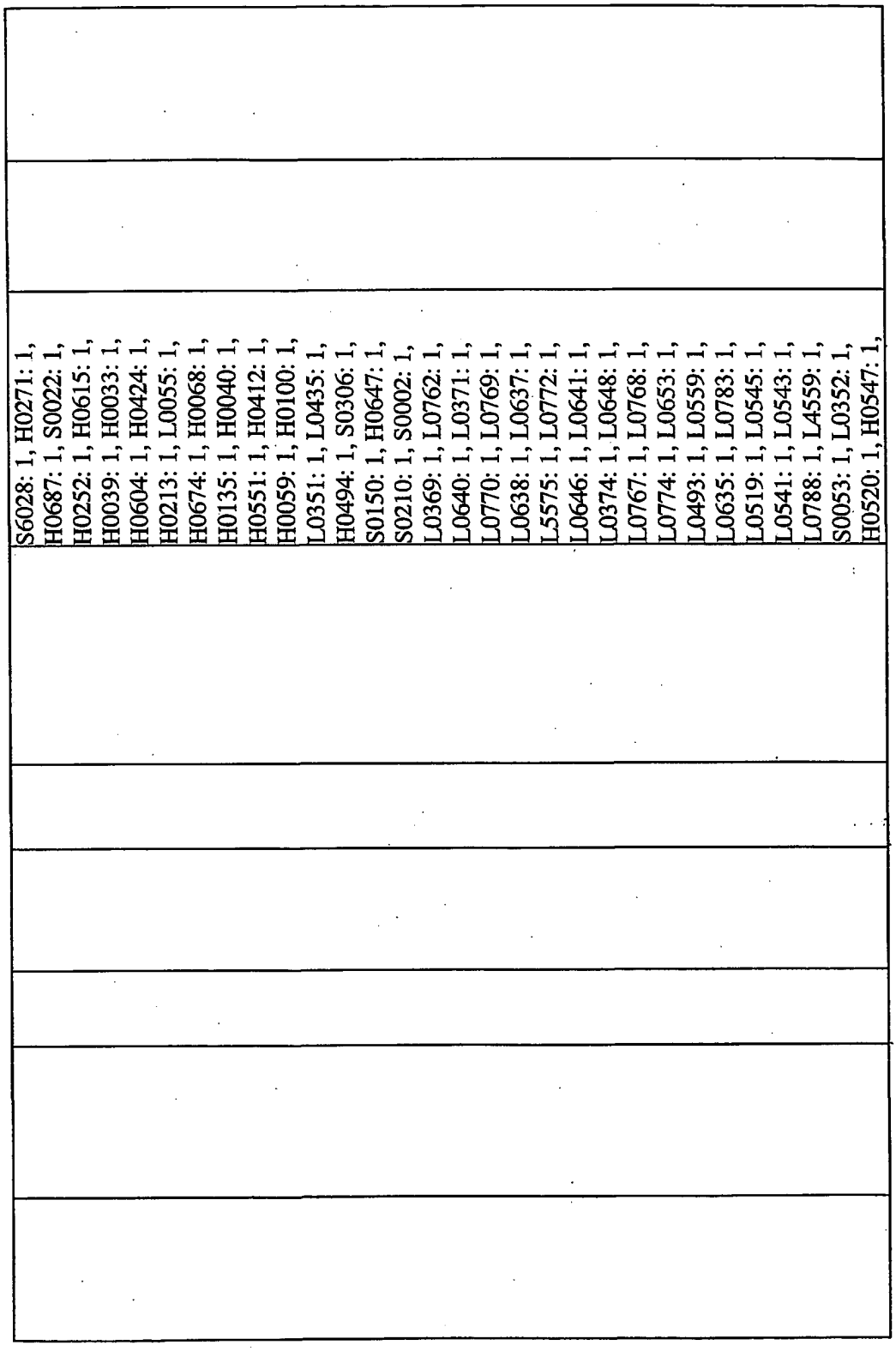
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HSPSG13	HSPSG13R	1980	2 - 784	4155				
HSPSG42	HSPSG42R	1981	3 - 596	4156	Glu-6 to Thr-11, His-31 to Asn-36, Thr-68 to Ile-76, Met-80 to Arg-89, Glu-123 to Gln-132, Arg-140 to Leu-147.			
HSPSG50	HSPSG50R	1982	123 - 608	4157	Glu-1 to Ile-6.			
HSPSG89	HSPSG89R	1983	94 - 651	4158	Pro-36 to Lys-44, Ile-46 to Ser-52, Val-82 to Gln-89, Gly-99 to Ala-104, Tyr-165 to Leu-171.			
HSPSH39	HSPSH39R	1984	11 - 793	4159				
HSPSH41	HSPSH41R	1985	3 - 431	4160				
HSPSH49	HSPSH49R	1986	3 - 539	4161				
HSPSI65	HSPSI65R	1987	3 - 734	4162	Asp-7 to Lys-15, His-142 to Glu-156,			

HSPSJ71	HSPSJ71R	1988	2 - 310	4163	Glu-181 to Phe-190.	H0124: 19, H0052: 10, L0751: 7, L0747: 7, H0255: 6, H0441: 6, H0556: 5, S0222: 5, H0265: 4, S0360: 4, H0620: 4, L0655: 4, H0144: 4, L0439: 4, L0596: 4, L0601: 4, S0132: 3, H0575: 3, H0123: 3, H0012: 3, H0024: 3, H0617: 3, H0087: 3, H0529: 3, L0764: 3, L0662: 3, L0766: 3, L0663: 3, L0565: 3, L0438: 3, H0660: 3, L0743: 3, L0740: 3, H0445: 3, H0218: 2, H0585: 2, S0418: 2, S0444: 2, S0408: 2, H0208: 2, S0278: 2, H0261: 2, H0333: 2, H0706: 2, H0581: 2, S0049: 2, H0009: 2, L0471: 2, S0051: 2, T0010: 2, H0083: 2, H0594: 2, T0006: 2, H0628: 2, H0038: 2, S0440: 2, S0142: 2, S0344: 2,		

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HSPSJ72	HSPSJ72R	1989	1 - 444	4164		H0617: 14, L0665: 14, L0657: 11, H0682: 11, H0521: 10, S0360: 8, H0423: 7, H0657: 5, H0620: 5, H0687: 5, L0664: 5, H0547: 5, S0406: 5, S0376: 4, H0059: 4, H0641: 4, S0422: 4, L0648: 4, L0768: 4, H0658: 4, H0670: 4, H0666: 4, H0522: 4, H0584: 3, H0713: 3, H0716: 3, H0341: 3, H0638: 3, H0618: 3, H0039: 3, H0087: 3, H0509: 3, L0662: 3, L0775: 3, L0659: 3, H0689: 3,	

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HSPSQ22	HSPSQ22R	1990	1 - 339	4165	Pro-6 to Gly-13, Pro-23 to Lys-32, Lys-94 to Ala-112.			
HSPSQ57	HSPSQ57R	1991	1 - 327	4166	Glu-17 to Asp-32.			
HSPSY67	HSPSY67R	1992	2 - 442	4167		H0683: 242, S0358: 3, L0745: 3, H0656: 2, H0484: 2, S0354: 2, H0370: 2, H0427: 2, T0010: 2, H0039: 2, H0521: 2, S0001: 1, H0619: 1, H0592: 1, H0042: 1, H0618: 1, H0327: 1, H0024: 1, H0266: 1, H0288: 1, H0135: 1, H0551: 1, H0623: 1, H0130: 1, S0210: 1, L0774: 1, L0654: 1, L0438: 1, H0593: 1, H0539: 1, L0439: 1, H0707: 1, H0422: 1 and H0293: 1.		
HSPSZ69	HSPSZ69R	1993	2 - 406	4168				
HSPTA57	HSPTA57R	1994	244 - 438	4169				
HSPTN57	HSPTN57R	1995	2 - 61	4170	Ala-1 to Lys-9, Val-11 to Trp-17.			
HSSDM17	HSSDM17R	1996	46 - 210	4171				
HSWBF04	HSWBF04R	1997	36 - 302	4172	Ser-1 to Thr-8,			

HSWBP42	HSWBP42R	1998	188 - 364	4173	Glu-17 to Ala-32, Arg-39 to Trp-47.				
HSXEM65	HSXEM65R	1999	84 - 308	4174	Met-9 to Arg-14, Leu-23 to Lys-29, Lys-50 to Asn-56.				
					Ser-7 to Gly-12, Pro-23 to Pro-40, Ala-49 to Val-54.	L0803: 10, L0794: 4, L0779: 4, L0789: 2, H0648: 2, S0442: 1, S0045: 1, S0036: 1, L0520: 1, L0763: 1, L0769: 1, L0800: 1, L0644: 1, L0764: 1, L0773: 1, L0767: 1, L0804: 1, L0774: 1, L0805: 1, L0517: 1, H0659: 1, L0777: 1 and L0758: 1.			
HTGAR42	HTGAR42R	2000	136 - 297	4175	Ser-4 to Thr-10, Leu-42 to Pro-51.	H0615: 2 and S0134: 1.			
HTLCU84	HTLCU84R	2001	131 - 406	4176	Asp-55 to Val-63, Cys-80 to Arg-92.				
HTSHG06	HTSHG06R	2002	107 - 295	4177					
HTTDP76	HTTDP76R	2003	169 - 423	4178	Pro-8 to Trp-14, Arg-20 to Ser-27, Glu-52 to Glu-60.				
HUFCQ37	HUFCQ37R	2004	94 - 366	4179	Pro-26 to Gly-39, Pro-68 to Arg-75.	L0439: 15, H0052: 11, S0007: 9, L0438: 6, L0731: 6, L0779: 5, L0754: 4, H0550: 3, L0769: 3, S0126: 3,			

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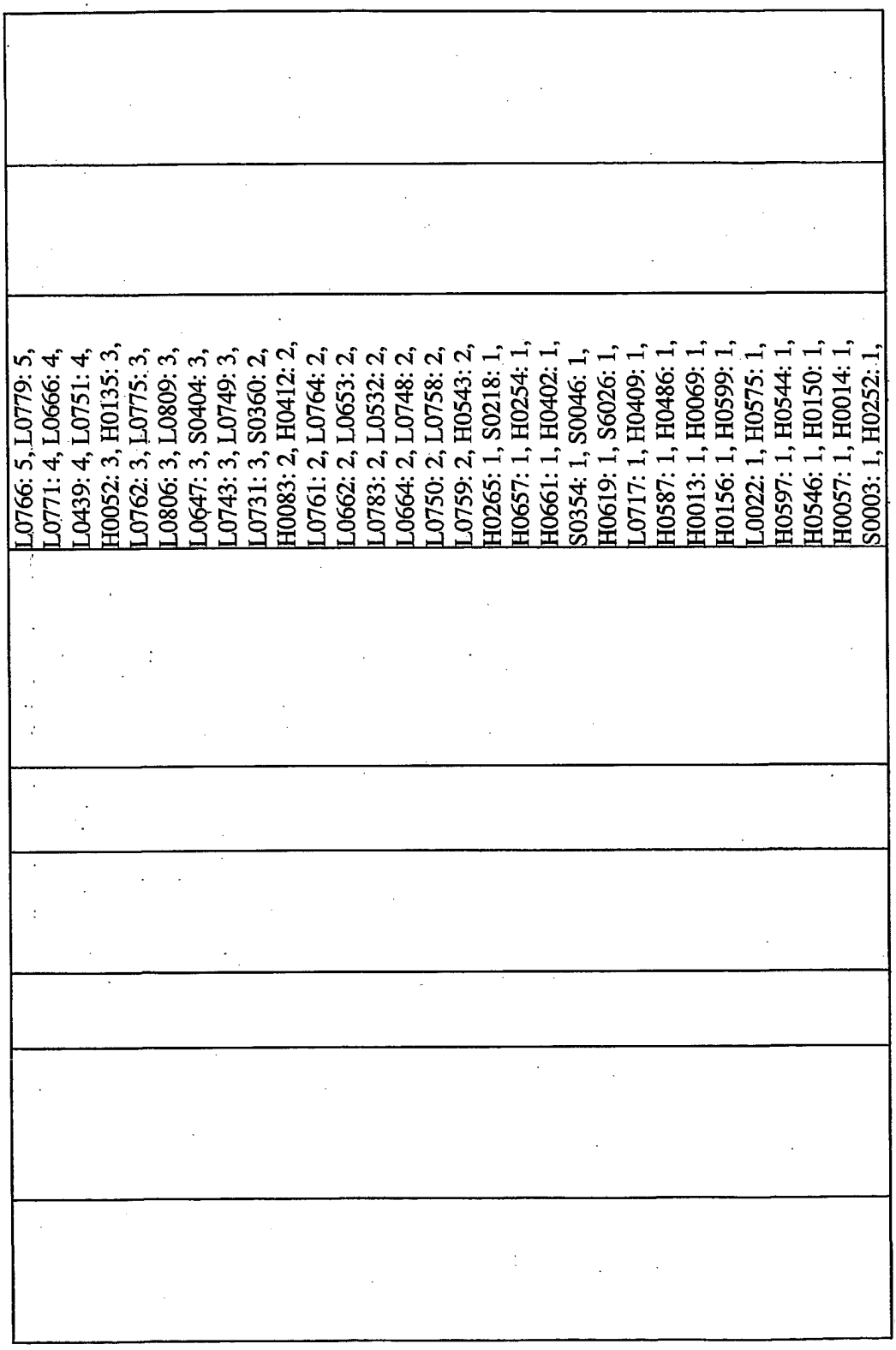
HULAP70	HULAP70R	2005	2 - 349	4180	Arg-8 to Arg-28.				
HUSGA11	HUSGA11R	2006	19 - 390	4181	Arg-11 to Arg-18, Ser-42 to Arg-52, Met-62 to Pro-73, Pro-102 to Gly-115.				
HUSIL88	HUSIL88R	2007	187 - 288	4182					
HUUCH08	HUUCH08RA	2008	351 - 620	4183					
HUVFA39	HUVFA39R	2009	1 - 462	4184	Arg-2 to Gly-12, Arg-28 to Gly-41, Gly-48 to Val-68, Lys-94 to Arg-118.				
HVCAA31	HVCAA31R	2010	94 - 618	4185	Met-4 to Thr-22, Asp-45 to Gly-50, Gly-65 to Asp-70, Lys-96 to Asp-104, Ile-121 to Leu-126, Met-133 to Glu-144, Ala-149 to Asn-156.				
HVCAA37	HVCAA37R	2011	208 - 717	4186	Ile-36 to Glu-41, Glu-55 to Lys-63, Lys-68 to Gln-81, Pro-84 to Lys-90, Pro-108 to Ser-119.				
HVCAA68	HVCAA68R	2012	2 - 373	4187	Pro-22 to Pro-28, Glu-109 to Arg-118.				

HVCAA94	HVCAA94R	2013	1 - 462	4188			
HVCAB02	HVCAB02R	2014	2 - 649	4189		H0666: 696, H0660: 11, L0666: 7, H0617: 4, L0664: 4, H0549: 3, H0620: 3, H0181: 3, H0593: 3, H0684: 3, H0484: 2, H0619: 2, H0051: 2, H0606: 2, H0670: 2, L0748: 2, L0439: 2, S0040: 1, H0483: 1, H0255: 1, H0662: 1, S0007: 1, H0486: 1, H0052: 1, H0597: 1, H0046: 1, H0009: 1, H0012: 1, H0059: 1, T0041: 1, H0517: 1, L0770: 1, L0764: 1, L0803: 1, L0783: 1, L0809: 1, H0435: 1, H0658: 1, H0539: 1, H0521: 1, H0696: 1 and S0434: 1.		
HVCAB03	HVCAB03R	2015	353 - 664	4190	Arg-1 to Gln-18, Asp-52 to Leu-57, Asp-67 to Lys-74, Asp-85 to Ala-92.		
HVCAB18	HVCAB18R	2016	3 - 758	4191			
HVCAB44	HVCAB44R	2017	3 - 224	4192		L0769: 7, L0747: 7, L0777: 7, L0752: 7, L0665: 6, L0770: 5,	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HVCAB52	HVCAB52R	2018	4 - 612	4193		H0615: 1, H0030: 1, H0644: 1, H0617: 1, S0364: 1, H0316: 1, H0598: 1, S0036: 1, H0063: 1, H0646: 1, S0426: 1, L0369: 1, L0772: 1, L0773: 1, L0767: 1, L0774: 1, L0375: 1, L0378: 1, L0655: 1, L0656: 1, L0790: 1, L0663: 1, H0520: 1, H0689: 1, H0670: 1, H0660: 1, H0666: 1, S0152: 1, H0521: 1, H0436: 1, S0206: 1, L0744: 1, L0786: 1, L0755: 1, L0587: 1, L0362: 1, H0422: 1, S0456: 1 and L0600: 1.			
HVCAB57	HVCAB57R	2019	1 - 357	4194					
HVCAB88	HVCAB88R	2020	83 - 739	4195	Lys-6 to Thr-11, Gly-22 to Phe-30, Leu-40 to Gly-53, Arg-56 to Lys-64, Lys-93 to Leu-101, Met-176 to Leu-181.				
HVCAC42	HVCAC42R	2021	319 - 417	4196	Arg-7 to Asp-13.				
HVCAD52	HVCAD52R	2022	1 - 369	4197					

HVCAE01	HVCAE01R	2023	49 - 663	4198	Tyr-44 to Asp-49, Pro-132 to Leu-139, Cys-168 to His-174.			
HVCAE15	HVCAE15R	2024	3 - 605	4199	Pro-49 to Val-58, Gln-60 to Gln-78, Arg-85 to His-99, Phe-122 to Asp-128, Arg-157 to Arg-163, Leu-178 to Thr-193.			
HVCAE22	HVCAE22R	2025	2 - 493	4200	Gly-19 to Ala-24, Asn-32 to Val-38.	S0358: 7, H0659: 7, H0542: 7, H0543: 6, L0666: 5, L0747: 5, S0418: 4, H0494: 4, L0657: 4, L0517: 4, S0374: 4, L0731: 4, L0596: 4, H0341: 3, H0385: 3, S0346: 3, H0553: 3, S0144: 3, S0210: 3, L0764: 3, L0659: 3, L0663: 3, L0664: 3, H0521: 3, L0754: 3, L0779: 3, L0752: 3, L0755: 3, H0445: 3, H0422: 3, T0049: 2, S0116: 2, S0212: 2, S0282: 2, S0376: 2, S0360: 2, S0045: 2, H0486: 2, H0250: 2, H0427: 2, H0581: 2, H0251: 2,		

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HVCAE56	HVCAE56R	2026	75 - 572	4201	Asn-20 to Gln-27.			
HVCAG56	HVCAG56R	2027	3 - 551	4202	Arg-92 to Arg-101, Lys-134 to Asn-140, Ser-149 to Thr-159, Gly-166 to Ile-175.			

HVCAG86	HVCAG86R	2028	150 - 509	4203	Arg-6 to Pro-21.			
HVCAH03	HVCAH03R	2029	3 - 689	4204		H0620: 16, L0747: 12, H0599: 11, L0758: 9, S0358: 8, L0751: 7, L0754: 7, L0596: 7, H0556: 6, H0393: 5, H0706: 5, H0052: 5, H0616: 5, H0529: 5, L0774: 5, L0776: 5, H0483: 4, S0442: 4, H0253: 4, H0012: 4, H0083: 4, S0150: 4, L0662: 4, H0670: 4, H0521: 4, L0748: 4, L0581: 4, H0543: 4, H0341: 3, S0376: 3, H0580: 3, S0007: 3, S0280: 3, H0036: 3, H0618: 3, H0581: 3, H0309: 3, H0510: 3, H0428: 3, H0040: 3, H0087: 3, L0764: 3, L0775: 3, L0655: 3, L0666: 3, L0663: 3, L0664: 3, H0547: 3, L0749: 3, L0750: 3, L0595: 3, H0657: 2, H0656: 2, S0116: 2, H0638: 2, S0356: 2, S0360: 2, S0046: 2,		

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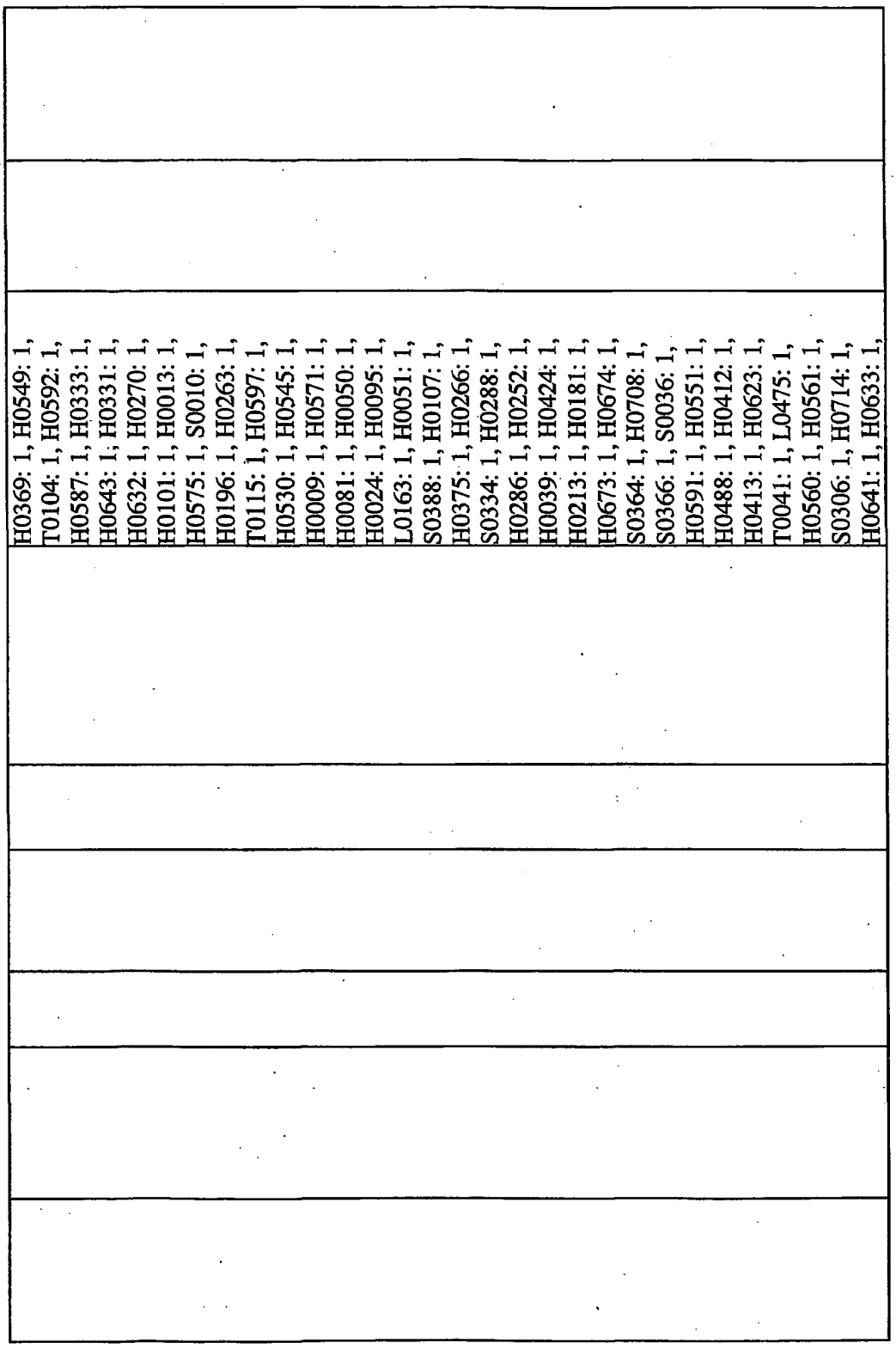
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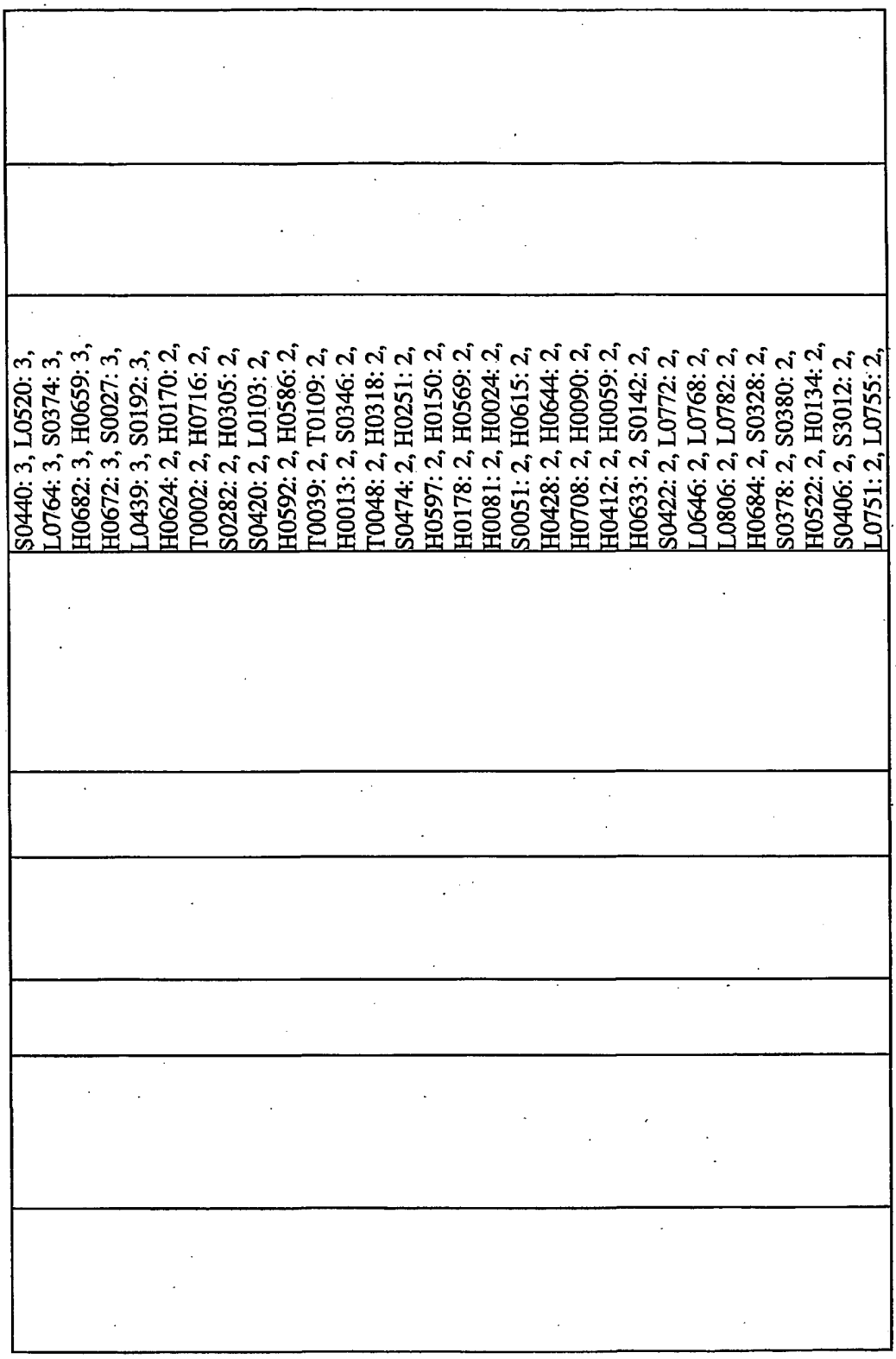
H0641: 1, H0633: 1,

HVCAI08	HVCAI08R	2032	67 - 453	4207	Pro-6 to Arg-13, Met-34 to Asp-41, Lys-65 to Thr-74.	L0748: 28, L0754: 27, L0740: 15, H0056: 13, L0750: 13, S0007: 12, L0757: 12, S0126: 11, S0222: 10, L0731: 10, S0360: 9, H0144: 9, S0358: 8, H0009: 8, L0005: 7, S0010: 7, H0266: 7, L0742: 7, L0752: 7, H0547: 6, S0408: 5, S0046: 5, L0471: 5, S0003: 5, S0028: 5, L0758: 5, L0362: 5, S0026: 5, H0294: 4, H0341: 4, H0638: 4, S0045: 4, H0327: 4, H0039: 4, H0031: 4, H0413: 4, S0210: 4, L0769: 4, L0662: 4, L0775: 4, L0776: 4, L0809: 4, H0689: 4, S3014: 4, S0206: 4, L0747: 4, H0445: 4, L0608: 4, H0661: 3,.S0376: 3, S0278: 3, H0369: 3, H0441: 3, H0575: 3, S0049: 3, S0388: 3, S0036: 3, H0616: 3, H0100: 3, H0494: 3,		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T0048: 2, H0318: 2,
S0474: 2, H0251: 2,
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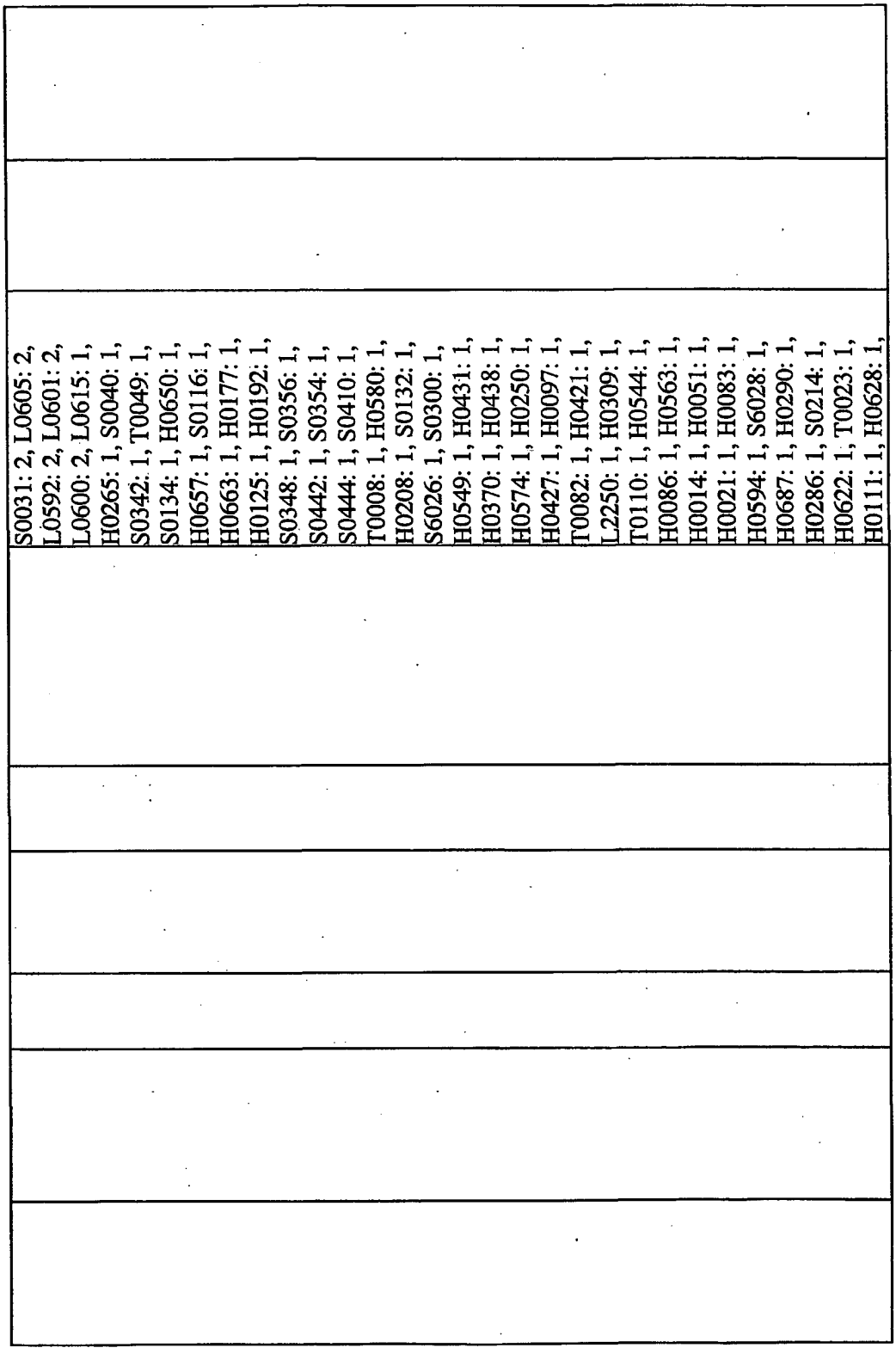
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HVCAI24	HVCAI24R	2033	108 - 365	4208	Asn-1 to Lys-6.	L0596: 1, L0588: 1, L0599: 1, L0366: 1, S0011: 1, H0668: 1, H0216: 1, S0242: 1, S0196: 1, H0542: 1, H0543: 1, L0697: 1, L0698: 1, S0398: 1, S0424: 1, S3020: 1 and S0460: 1.		
HVCAI79	HVCAI79R	2034	2 - 508	4209				
HVCAJ27	HVCAJ27R	2035	1 - 537	4210		S0408: 5, L0809: 5, L0800: 4, L0804: 4, H0647: 3, L0803: 3, L0775: 3, L0805: 3, S0126: 3, L0751: 3, S0360: 2, S0278: 2, H0409: 2, H0424: 2, H0617: 2, H0494: 2, L0783: 2, H0670: 2, L0747: 2, L0777: 2, L0731: 2, L0601: 2, H0556: 1, H0295: 1, S0116: 1, H0341: 1, S0442: 1, S0358: 1, S0376: 1, H0370: 1, H0042: 1, H0575: 1, S0049: 1, H0150: 1, H0163: 1, S0294: 1, S0438: 1, H0633: 1,		

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HVCAJ81	HVCAJ81R	2036	1 - 477	4211	Lys-61 to Gln-73, Gln-81 to Ser-97.				
HVCAJ95	HVCAJ95R	2037	1 - 210	4212	Arg-14 to Gly-41, Arg-47 to Glu-53, Gln-56 to Lys-70.				
HVCAK02	HVCAK02R	2038	3 - 467	4213	Glu-1 to Lys-9.				
HVCAL06	HVCAL06R	2039	3 - 383	4214					
HVCAO17	HVCAO17R	2040	1 - 516	4215			H0009: 3, H0135: 3, H0494: 3, H0265: 2, H0341: 2, H0484: 2, S0046: 2, S0222: 2, H0266: 2, S0144: 2, H0658: 2, L0742: 2, H0542: 2, H0423: 2, H0171: 1, T0002: 1,		

HVCAO63	HVCAO63R	2041	10 - 306	4216	Pro-56 to Thr-65.	H0685: 1, S0040: 1, H0295: 1, S0420: 1, S0356: 1, S0360: 1, H0392: 1, H0586: 1, T0109: 1, H0427: 1, H0599: 1, H0618: 1, H0318: 1, H0597: 1, H0544: 1, H0012: 1, H0024: 1, H0014: 1, S0022: 1, H0428: 1, H0535: 1, H0068: 1, H0090: 1, H0040: 1, H0063: 1, H0264: 1, H0413: 1, T0042: 1, H0560: 1, H0633: 1, S0142: 1, S0422: 1, H0529: 1, H0519: 1, S0126: 1, H0684: 1, H0666: 1, H0672: 1, H0134: 1, H0214: 1, H0631: 1, S0027: 1, S0028: 1, L0753: 1, L0757: 1, L0599: 1, L0608: 1, L0594: 1, S0026: 1, H0667: 1, H0136: 1, S0276: 1 and H0543: 1.			
HVCAP89	HVCAP89R	2042	3 - 407	4217					
HVCAQ53	HVCAQ53R	2043	28 - 480	4218	Val-105 to Ile-113,				

HVCAQ84	HVCAQ84R	2044	193 - 402	4219	Asp-15 to Thr-23.				
HVCAR87	HVCAR87R	2045	3 - 455	4220					
HVCAS08	HVCAS08R	2046	2 - 715	4221					
HVCAS52	HVCAS52R	2047	1 - 687	4222	Asp-128 to Phe-137, Arg-145 to Arg-151.	L0777: 12, H0341: 6, S0440: 6, S0126: 6, S0358: 5, H0250: 5, H0428: 5, H0031: 5, H0090: 5, L0747: 5, L0731: 5, H0542: 5, S0422: 4, H0547: 4, L0748: 4, L0749: 4, L0759: 4, H0624: 3, H0580: 3, H0486: 3, S0003: 3, S0214: 3, H0494: 3, L0770: 3, L0764: 3, L0758: 3, L0599: 3, S0026: 3, H0543: 3, H0170: 2, H0657: 2, H0656: 2, S0420: 2, S0442: 2, S0444: 2, S0010: 2, H0318: 2, H0581: 2, H0046: 2, H0014: 2, H0083: 2, L0483: 2, H0040: 2, H0551: 2, L0769: 2, L0773: 2, L0766: 2, L0774: 2, L0659: 2, H0144: 2,			

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			114 - 257				
		2048					
	HVCAS57R						
HVCAS57							

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						H0668: 1, S0276: 1 and H0422: 1.		
HVCAU64	HVCAU64R	2049	3 - 404	4224	Arg-7 to Val-15.			
HVCBD18	HVCBD18R	2050	190 - 309	4225	Val-3 to Lys-9, Leu-32 to Gln-40.			
HVCBE76	HVCBE76R	2051	3 - 431	4226				
HVCBE79	HVCBE79R	2052	3 - 524	4227				
HVCBF38	HVCBF38R	2053	3 - 251	4228				
HVCBF89	HVCBF89R	2054	2 - 361	4229		AR039: 419, AR096: 339, AR053: 225, AR052: 212, AR104: 168, AR089: 168, AR060: 114, AR033: 108, AR055: 99, AR061: 74		
HVCBG01	HVCBG01R	2055	22 - 318	4230	Lys-7 to Thr-13, Asp-24 to Thr-30, Gly-39 to Glu-52.			
HVCBQ31	HVCBQ31R	2056	2 - 448	4231				
HVCCA08	HVCCA08R	2057	2 - 298	4232				
HVCCK34	HVCCK34R	2058	34 - 699	4233				
HVCCR91	HVCCR91R	2059	1 - 156	4234				
HVCCV93	HVCCV93R	2060	203 - 469	4235	Ser-25 to Asn-31, Asp-38 to Val-48, Ser-57 to Gly-63.			
HVCDA75	HVCDA75R	2061	1 - 315	4236				
HVCDD19	HVCDD19R	2062	31 - 459	4237	Pro-1 to Ser-7, Val-22 to Asn-29,			

					Pro-45 to Pro-51, Arg-59 to Val-64, Val-92 to Lys-98.				
HVCDF50	HVCDF50R	2063	3 - 353	4238					
HVCDH77	HVCDH77R	2064	2 - 679	4239	Ser-56 to Phe-69, Arg-113 to Thr-123, Leu-128 to Ser-135, Lys-148 to Ala-156, Gly-166 to Ser-171, Glu-188 to Leu-194, Ala-211 to Gly-222.	H0666: 8, S0144: 6, L0747: 5, H0545: 4, L0769: 4, L0766: 4, L0731: 4, H0341: 3, L0764: 3, L0794: 3, L0750: 3, L0755: 3, L0758: 3, S0045: 2, H0257: 2, H0581: 2, H0546: 2, H0135: 2, L0803: 2, L0657: 2, L0789: 2, L0666: 2, S0044: 2, H0445: 2, L0588: 2, L0594: 2, L0601: 2, H0543: 2, S0040: 1, H0295: 1, H0583: 1, S0116: 1, S0212: 1, H0661: 1, H0664: 1, S0418: 1, S0356: 1, S0358: 1, S0360: 1, S0007: 1, S0046: 1, S0132: 1, S0278: 1, H0592: 1, H0586: 1, H0559: 1, H0575: 1, S0182: 1, H0620: 1, S0388: 1, H0083: 1, S0312: 1,			

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HVVAB25	HVVAB25R	2065	3 - 155	4240					
HVVAB37	HVVAB37R	2066	74 - 619	4241					
HVVAC18	HVVAC18R	2067	56 - 238	4242					
HVVAD74	HVVAD74R	2068	403 - 570	4243			L0766: 12, S0412: 8, S0422: 4, L0756: 4, H0341: 3, H0638: 3, L0770: 3, L0666: 3, L0777: 3, S0360: 2, H0318: 2, H0327: 2,		

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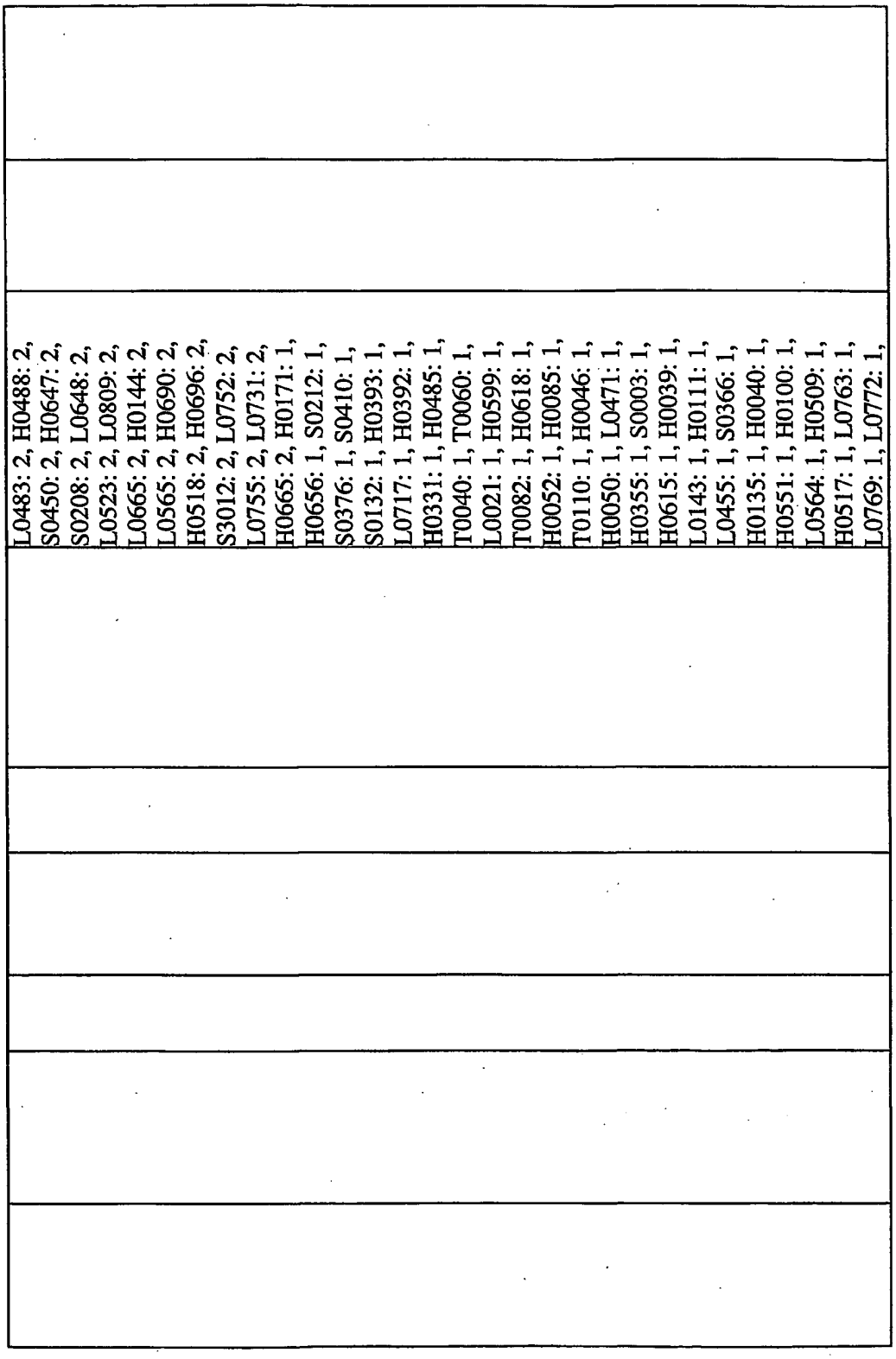
HVVAE73	HVVAE73R	2069	96 - 347	4244	Glu-21 to Ile-26.				
HVVAE88	HVVAE88R	2070	157 - 381	4245	Ser-1 to Asp-9, Lys-26 to Gln-36.	H0672: 2, L0748: 2, H0156: 1 and H0494: 1.			
HVVAH91	HVVAH91R	2071	3 - 245	4246		L0747: 5, L0731: 4, L0742: 3, L0745: 3, L0769: 2, L0766: 2, L0774: 2, L0597: 2, L0604: 2, T0049: 1, S0358: 1, H0549: 1, H0486: 1, T0040: 1, S0280: 1, H0318: 1, H0263: 1, H0551: 1, H0633: 1, H0529: 1, L0640: 1, L0763: 1, L0771: 1, L0768: 1, L0388: 1, L0657: 1, L0659: 1, L0517: 1, L0666: 1, L0663: 1, H0648: 1, H0672: 1, H0521: 1, L0749: 1, L0750: 1, L0779: 1, L0780: 1 and L0592: 1.			
HVVAI03	HVVAI03R	2072	2 - 307	4247					
HVVAJ23	HVVAJ23R	2073	3 - 527	4248	Gln-33 to Ala-38, Thr-47 to Asn-64, Pro-117 to Leu-122, Thr-160 to Gly-171.				
HVVAJ28	HVVAJ28R	2074	1 - 327	4249	His-1 to Trp-6, Gly-28 to Asp-34, Arg-41 to Ala-53,				

HVVAJ47	HVVAJ47R	2075	159 - 443	4250	Arg-69 to Thr-76, Leu-97 to Glu-103.	L0659: 55, H0644: 23, L0748: 18, L0666: 17, L0747: 17, H0622: 16, S0194: 16, H0553: 15, L0662: 15, S0126: 15, L0740: 15, L0754: 14, H0031: 13, H0593: 12, L0649: 11, H0435: 11, L0757: 11, H0124: 10, S0250: 9, S0356: 8, H0672: 7, L0362: 7, L0779: 6, S0210: 5, L0771: 5, L0663: 5, L0664: 5, H0547: 5, L0750: 5, L0601: 5, S0360: 4, H0619: 4, L0764: 4, L0804: 4, L0775: 4, S0358: 3, H0486: 3, H0628: 3, H0264: 3, L0451: 3, L0776: 3, L0655: 3, L0783: 3, H0693: 3, H0660: 3, S0454: 3, L0749: 3, L0605: 3, S0192: 3, H0170: 2, H0294: 2, S0180: 2, H0586: 2, H0013: 2, H0687: 2, H0428: 2,		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HVVAK42	HVVAK42R	2076	121 - 312	4251		L0646: 1, L0768: 1, L0375: 1, L0784: 1, L0806: 1, L0805: 1, L0653: 1, L0654: 1, L0517: 1, L0384: 1, L0383: 1, L0647: 1, L0789: 1, L0791: 1, L0438: 1, H0520: 1, H0689: 1, H0682: 1, H0684: 1, S0152: 1, H0704: 1, H0555: 1, S0432: 1, S3014: 1, S0027: 1, S0028: 1, L0744: 1, L0758: 1, H0595: 1, H0707: 1, S0436: 1, L0591: 1, L0599: 1, S0196: 1, H0422: 1, S0384: 1 and L0600: 1.		
HVVAK46	HVVAK46R	2077	3 - 782	4252	Lys-1 to Lys-14, Phe-21 to Trp-26, Val-87 to Cys-92, Thr-139 to Gln-153, Gln-156 to Lys-162, Glu-171 to Leu-177.			
HVVAK68	HVVAK68R	2078	372 - 584	4253		L0747: 22, L0599: 11, L0766: 9, L0748: 9, L0483: 8, L0740: 7, L0665: 5, L0754: 5,		

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HVVAK85	HVVAK85R	2079	2 - 373	4254					
HVVAL81	HVVAL81R	2080	97 - 408	4255	Gly-72 to Asp-81.	AR089: 67, AR104: 8,			

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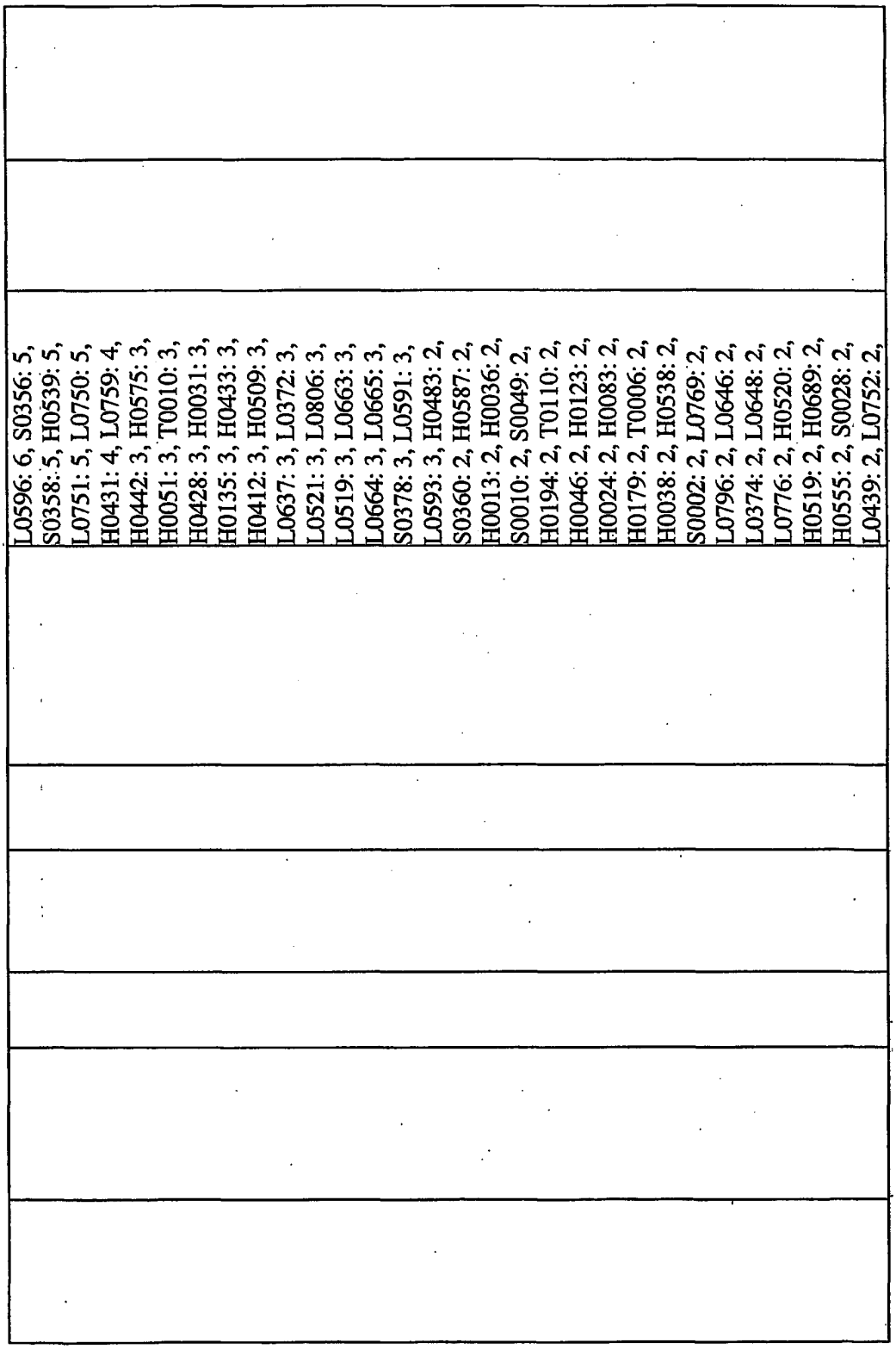
HVVAP65	HVVAP65RP00B	2081	124 - 354	4256	Arg-1 to Cys-10, Asn-29 to Phe-38.			
HVVAS27	HVVAS27RP00B	2082	3 - 413	4257				
HVVAW26	HVVAW26R	2083	1 - 324	4258	Lys-62 to Tyr-73.			
HVVBD91	HVVBD91RP00B	2084	2 - 436	4259				
HVVBF09	HVVBF09R	2085	3 - 236	4260	Leu-36 to Ser-43, Gly-68 to Phe-73.			
HVVBF66	HVVBF66R	2086	7 - 171	4261	Lys-17 to Tyr-22.	H0672: 2, S0007: 1, L0717: 1, H0545: 1, L0764: 1, L0649: 1, L0659: 1, L0809: 1, L0438: 1, H0555: 1, L0748: 1, L0754: 1 and L0752: 1.		
HVVBH88	HVVBH88R	2087	1 - 189	4262		L0659: 14, L0740: 11, H0052: 8, L0662: 8, L0666: 8, H0059: 7, H0265: 6, H0040: 6,		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HVVBI16	HVVBI16R	2088	2 - 592	4263		L0761: 1, L0803: 1, L0653: 1, L0661: 1, L0527: 1, L0636: 1, L0783: 1, L0809: 1, T0068: 1, L0438: 1, S0126: 1, H0690: 1, H0682: 1, H0435: 1, H0658: 1, H0670: 1, H0660: 1, H0672: 1, H0651: 1, S0380: 1, H0522: 1, S0044: 1, H0478: 1, H0479: 1, S0027: 1, L0742: 1, L0748: 1, L0747: 1, L0756: 1, L0757: 1, L0758: 1, H0444: 1, H0445: 1, L0597: 1, L0581: 1, L0603: 1, S0011: 1, S0194: 1, S0196: 1, S0042: 1, L0697: 1 and H0506: 1.		
HVVBJ08	HVVBJ08R	2089	150 - 578	4264	Gln-5 to Pro-13, Pro-25 to Lys-32, Asp-62 to Ser-72, Gln-78 to Ser-85, Pro-91 to Glu-105.				
HVVBJ55	HVVBJ55RP 00B	2090	3 - 413	4265					
HVVBK13	HVVBK13R	2091	1 - 633	4266					

HVVBO65	HVVBO65R	2092	3 - 644	4267	Pro-62 to Pro-73, Thr-80 to Ser-92, Gln-108 to Tyr-116.			
HVVBO88	HVVBO88R	2093	50 - 433	4268				
HVVBR70	HVVBR70RP00B	2094	2 - 406	4269				
HVVBT33	HVVBT33R	2095	116 - 316	4270	Asn-15 to Leu-27, Lys-48 to Val-53.			
HVVBT60	HVVBT60R	2096	454 - 2	4271				
HVVBY87	HVVBY87R	2097	3 - 161	4272				
HVVCB04	HVVCB04R	2098	2 - 580	4273	Pro-1 to Phe-9, Ser-111 to Asn-117, Ser-159 to Pro-167.			
HVVCB08	HVVCB08R	2099	1 - 792	4274	Ser-56 to Tyr-62, Gln-67 to Pro-74, Thr-83 to Gly-94, Gln-120 to Gln-130, Pro-150 to Ser-157.			
HVVCC06	HVVCC06R	2100	299 - 427	4275				
HVVCD65	HVVCD65R	2101	224 - 481	4276	Lys-40 to Gly-47.			
HVVCD81	HVVCD81R	2102	2 - 640	4277				
HVVCD87	HVVCD87R	2103	447 - 695	4278		L0439: 23, L0438: 20, H0556: 10, L0665: 10, S0358: 9, L0731: 8, H0423: 8, H0069: 7, H0622: 7, L0666: 7, L0748: 7, L0747: 7, H0486: 6, H0090: 6, L0664: 6, H0519: 6,		

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HVVCD90	HVVCD90R	2104	47 - 754	4279		H0144: 1, L0352: 1, H0520: 1, H0682: 1, H0660: 1, H0651: 1, H0710: 1, H0518: 1, S0152: 1, H0579: 1, H0696: 1, S0146: 1, H0576: 1, H0631: 1, S3012: 1, S0037: 1, S0028: 1, L0751: 1, L0754: 1, L0779: 1, L0777: 1, L0780: 1, L0753: 1, L0759: 1, S0031: 1, H0445: 1, L0687: 1, L0599: 1, L0608: 1, L0595: 1, H0136: 1, S0242: 1, S0194: 1, S0276: 1, H0543: 1, S0424: 1 and S0452: 1.			
HVVCE63	HVVCE63R	2105	338 - 778	4280					
HVVCE65	HVVCE65R	2106	2 - 214	4281					
HVVCF38	HVVCF38R	2107	3 - 497	4282					
HVVCG29	HVVCG29R	2108	1 - 441	4283		H0135: 2, S0046: 1, S0222: 1, H0052: 1, H0672: 1, S0328: 1 and H0214: 1.			
HVVCG31	HVVCG31R	2109	2 - 415	4284					
HVVCG46	HVVCG46R	2110	3 - 350	4285	Gly-16 to Lys-22, Trp-82 to Lys-87.				

HVVCG93	HVVCG93R	2111	1 - 405	4286	Arg-48 to Asn-57, Lys-77 to Glu-83, Phe-106 to Asp-112.	AR089: 107, AR096: 52, AR104: 30, AR060: 27, AR061: 14, AR055: 13		
HVVCH28	HVVCH28R	2112	3 - 350	4287	Glu-81 to Gly-91, Arg-107 to Asn-116.			
HVVCI28	HVVCI28R	2113	3 - 119	4288	Asp-10 to Lys-15, Lys-29 to Asp-34.			
HVVCI50	HVVCI50R	2114	44 - 460	4289				
HVVCI85	HVVCI85R	2115	3 - 647	4290	Asp-1 to Thr-14, Ala-76 to Thr-88, Asp-101 to Lys-115, Ala-128 to Gln-136, Pro-141 to Gln-151.			
HVVCJ51	HVVCJ51R	2116	1 - 351	4291		H0585: 4, H0457: 4, L0809: 4, L0747: 4, S0442: 3, H0492: 3, H0427: 3, H0318: 3, L0666: 3, H0690: 3, H0686: 2, H0662: 2, S0358: 2, S0408: 2, H0150: 2, H0135: 2, H0063: 2, H0494: 2, L0761: 2, L0764: 2, L0773: 2, L0662: 2, L0378: 2, L0665: 2, H0670: 2, S0406: 2, L0744: 2, L0749: 2, L0601: 2, H0170: 1,		

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HVVCK59	HVVCK59R	2117	1 - 147	4292		L0751: 3, L0757: 3, L0662: 2, H0686: 1, H0266: 1, L0055: 1, L0763: 1, L0764: 1, L0768: 1, L0805: 1, L0653: 1, L0666: 1, H0690: 1, H0672: 1, L0777: 1, L0758: 1 and S0276: 1.		
HVVCK78	HVVCK78R	2118	3 - 320	4293				
HVVCL52	HVVCL52R	2119	1 - 339	4294	Pro-11 to Lys-31, Ser-36 to Gln-44, Thr-53 to Gly-58, Ala-74 to Arg-87, Pro-105 to His-113.			
HVVCL73	HVVCL73R	2120	2 - 775	4295	Gly-8 to Lys-22, Phe-29 to Trp-34, Val-95 to Cys-100, Thr-147 to Gln-161, Gln-164 to Lys-170, Glu-179 to Leu-185, Pro-194 to Gly-199.			
HVVCM67	HVVCM67R	2121	3 - 293	4296	Trp-36 to Thr-43, Gly-51 to Thr-70, Tyr-87 to Glu-97.			
HVVCM84	HVVCM84R	2122	3 - 347	4297				
HVVCN20	HVVCN20R	2123	35 - 466	4298				
HVVCN29	HVVCN29R	2124	96 - 332	4299		H0521: 182, H0522: 34, S0002: 30, S0278: 27, H0638: 23, S0344:		

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HVVCN54	HVVCN54R	2125	2 - 460	4300				
HVVCN66	HVVCN66R	2126	3 - 212	4301				
HVVCO13	HVVCO13R	2127	2 - 352	4302	Gln-61 to Pro-68, Gln-103 to Ala-108, Tyr-111 to Thr-117.			
HVVCO16	HVVCO16R	2128	170 - 334	4303	Val-28 to Ser-33.			
HVVCO87	HVVCO87R	2129	3 - 404	4304	Lys-54 to Ala-67, Arg-77 to Thr-86.			
HVVCP41	HVVCP41R	2130	2 - 442	4305				
HVVCP88	HVVCP88R	2131	3 - 449	4306	Ala-35 to Ala-41, Pro-46 to Gly-54, Pro-67 to Gly-87.			
HVVCQ05	HVVCQ05R	2132	11 - 184	4307	Ser-23 to Lys-30.			
HVVCQ49	HVVCQ49R	2133	3 - 605	4308	Glu-74 to Arg-79, Glu-117 to Arg-134.			
HVVCQ70	HVVCQ70R	2134	10 - 144	4309	Arg-30 to Phe-36.	H0672: 2 and L0518: 1.		
HVVCQ93	HVVCQ93R	2135	1 - 630	4310				
HVVCS28	HVVCS28R	2136	105 - 335	4311				
HVVCS32	HVVCS32R	2137	35 - 217	4312	Arg-11 to Pro-17, Ser-33 to Lys-46.			
HVVCT54	HVVCT54R	2138	237 - 698	4313	His-1 to Asn-8, Arg-10 to Gly-16, Tyr-50 to Gly-56.	L0659: 55, H0644: 23, L0748: 18, L0666: 17, L0747: 17, H0622: 16, S0194: 16, H0553: 15,		

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HVVCT62	HVVCT62R	2139	340 - 522	4314					
HVVCU14	HVVCU14R	2140	365 - 529	4315	Ile-1 to Ser-6, Lys-13 to His-25.	L0748: 18, L0794: 7, L0438: 7, L0777: 7, L0809: 6, L0439: 6, L0756: 6, L0750: 5, L0717: 3, L0770: 3, L0776: 3, L0664: 3, L0747: 3, L0757: 3, S0222: 2, H0013: 2, H0596: 2, H0040: 2, L0769: 2, L0768: 2, L0766: 2, H0672: 2, L0731: 2, L0758: 2, L0591: 2, L0599: 2, H0624: 1, S0342: 1, H0638: 1, S0376: 1, H0549: 1, H0587: 1,			

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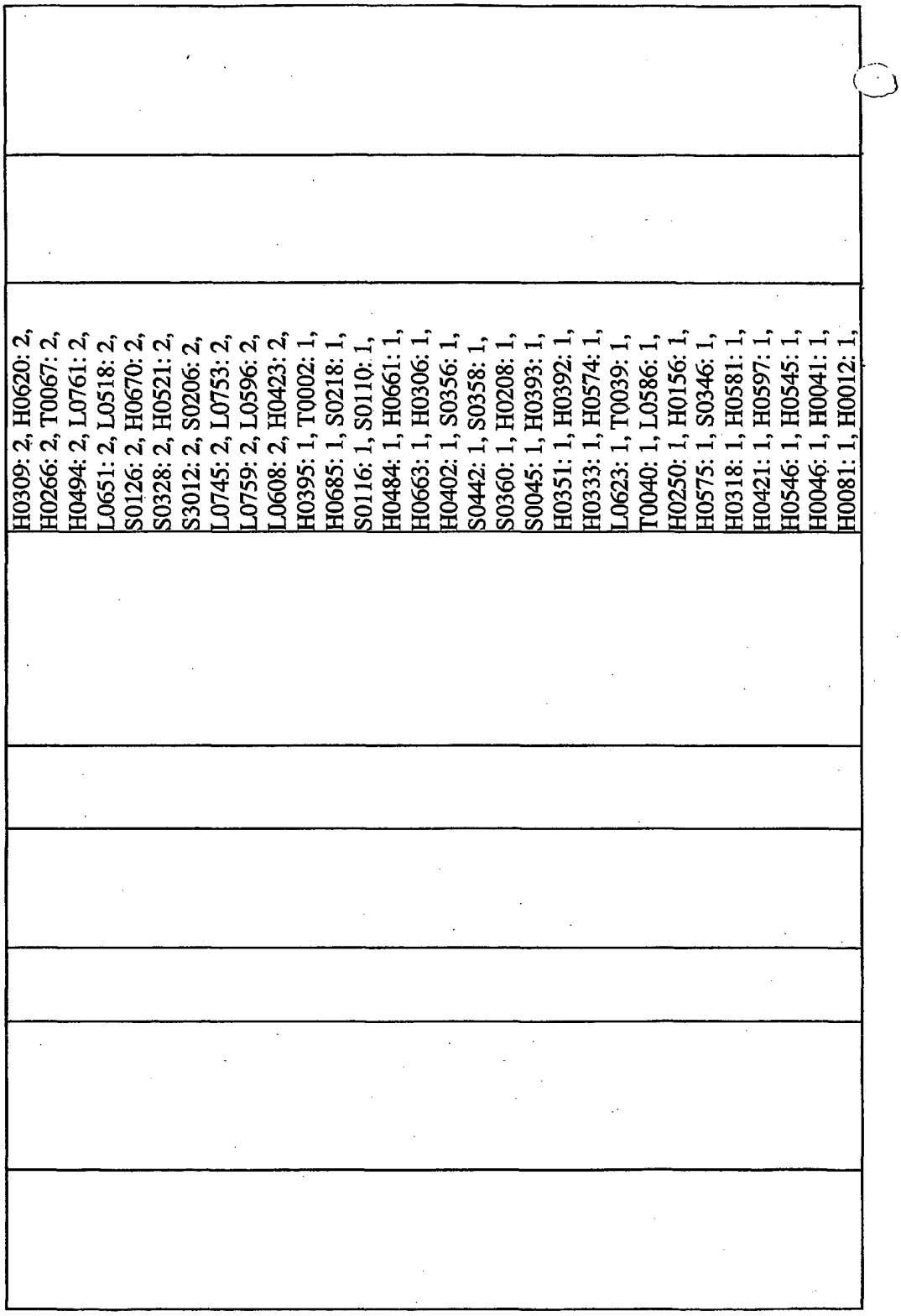
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HVVCV68	HVVCV68R	2143	2 - 244	4318	Pro-12 to Ser-18, Pro-25 to Pro-30, Ala-62 to Ser-70.				
HVVCW75	HVVCW75R	2144	3 - 410	4319	Met-22 to Asp-27, Cys-43 to Trp-50, Asp-79 to Trp-93, Glu-124 to Glu-136.	L0794: 5, H0617: 4, H0486: 3, L0800: 3, L0764: 3, H0672: 3, L0751: 3, S0360: 2, H0188: 2, S0022: 2, L0769: 2, L0803: 2, L0809: 2, L0665: 2, L0361: 2, H0556: 1, H0583: 1, H0657: 1, S0418: 1, L0005: 1, S0354: 1, S0408: 1, S0045: 1, S0046: 1, S6014: 1, H0587: 1, H0333: 1, H0559: 1, H0596: 1, H0673: 1, H0616: 1, H0494: 1, L0761: 1, L0662: 1, L0651: 1, L0659: 1, L0382: 1, L5622: 1, L0663: 1, H0690: 1, H0670: 1, S0152: 1, S0390: 1, L0747: 1, L0777: 1, L0731: 1, L0758: 1, S0436: 1,			

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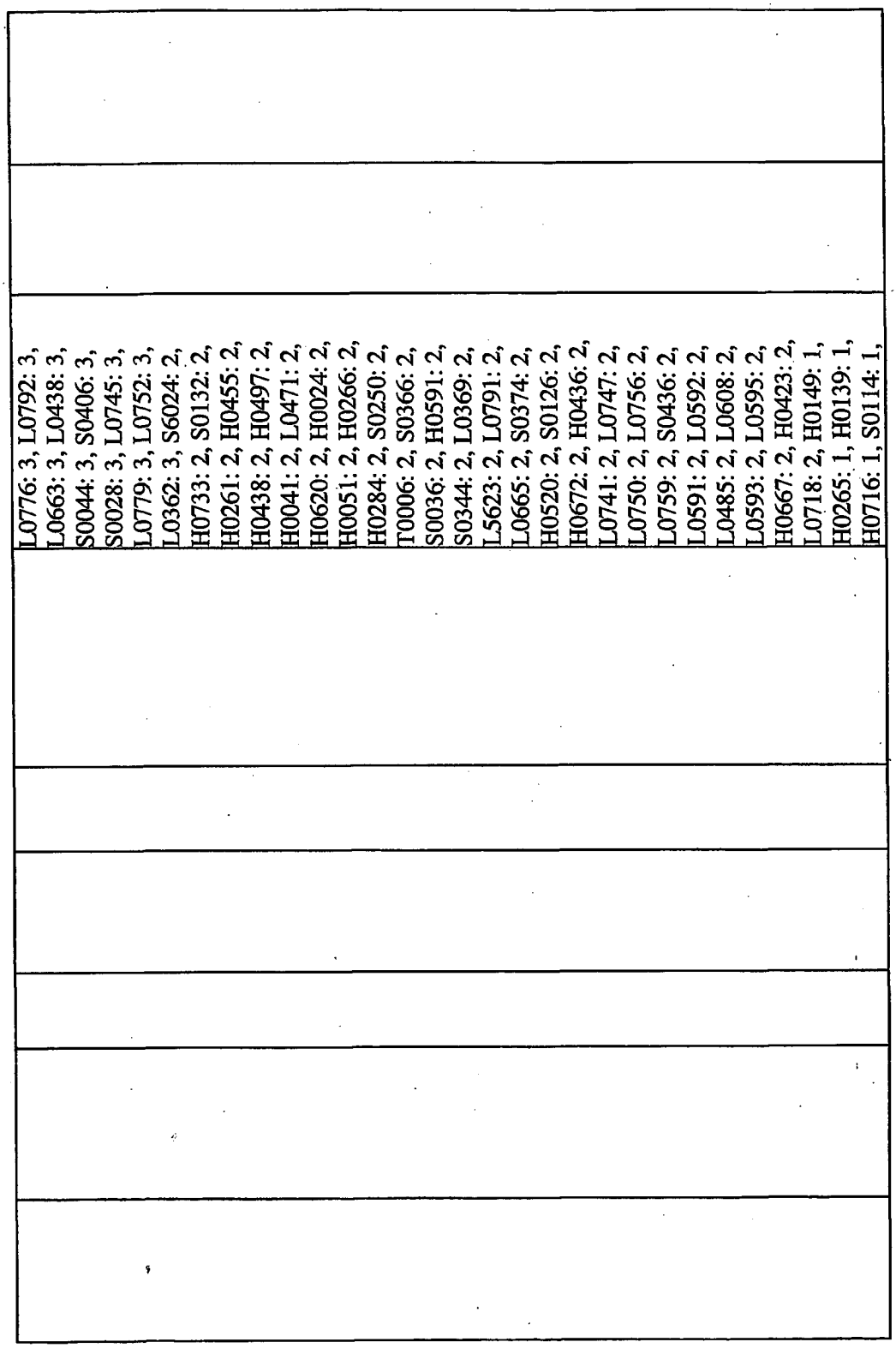
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					Ser-116 to Pro-128.			
HVVCY29	HVVCY29R	2147	2 - 775	4322	Ser-8 to Ser-14, Asn-68 to Tyr-74, His-80 to Val-91, Glu-141 to Phe-147, Ala-159 to Ser-170, Asp-184 to Gly-199.			
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HVVCY60	HVVCY60R	2149	1 - 588	4324	Lys-30 to Glu-36, Lys-55 to Tyr-68, Ile-82 to Asp-87, Trp-115 to Ser-125, Pro-139 to Pro-146.			
HVVCY62	HVVCY62R	2150	3 - 620	4325	Ala-17 to Lys-23, Leu-25 to Ala-35, Gln-71 to Ala-76, Tyr-79 to His-85, Pro-112 to Gly-120, Gly-149 to Tyr-165, Lys-175 to His-181.			
HVVCY75	HVVCY75R	2151	139 - 276	4326				
HVVCY77	HVVCY77R	2152	2 - 598	4327	Glu-179 to Ala-184.			
HVVCZ18	HVVCZ18R	2153	423 - 542	4328				
HVVCZ50	HVVCZ50R	2154	139 - 291	4329		H0412: 26, S0360: 11, S0126: 8, H0014: 7, H0628: 6, H0413: 6,		

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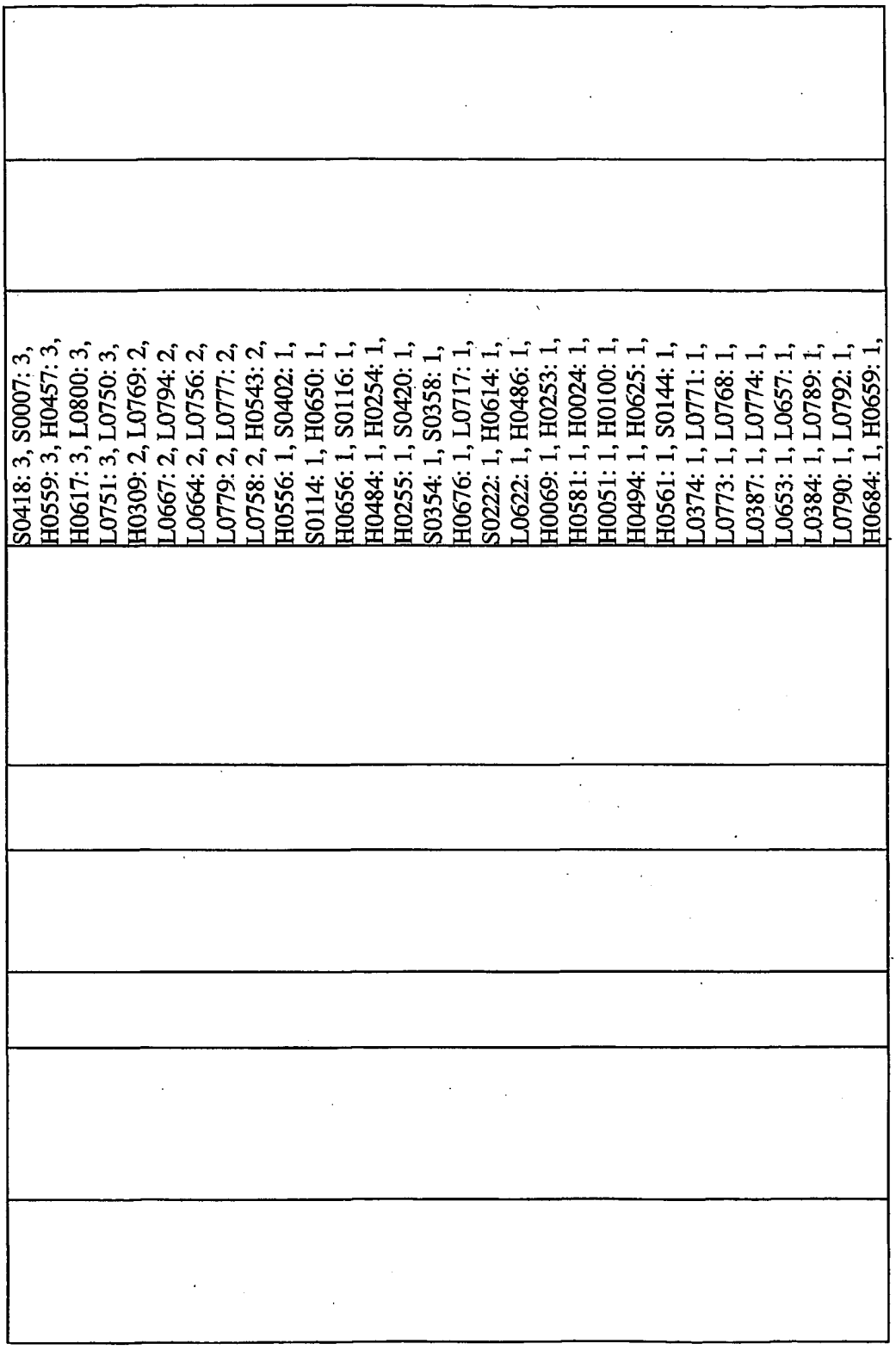
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S0354: 1, S0358: 1,
H0676: 1, L0717: 1,
S0222: 1, H0614: 1,
L0622: 1, H0486: 1,
H0069: 1, H0253: 1,
H0581: 1, H0024: 1,
H0051: 1, H0100: 1,
H0494: 1, H0625: 1,
H0561: 1, S0144: 1,
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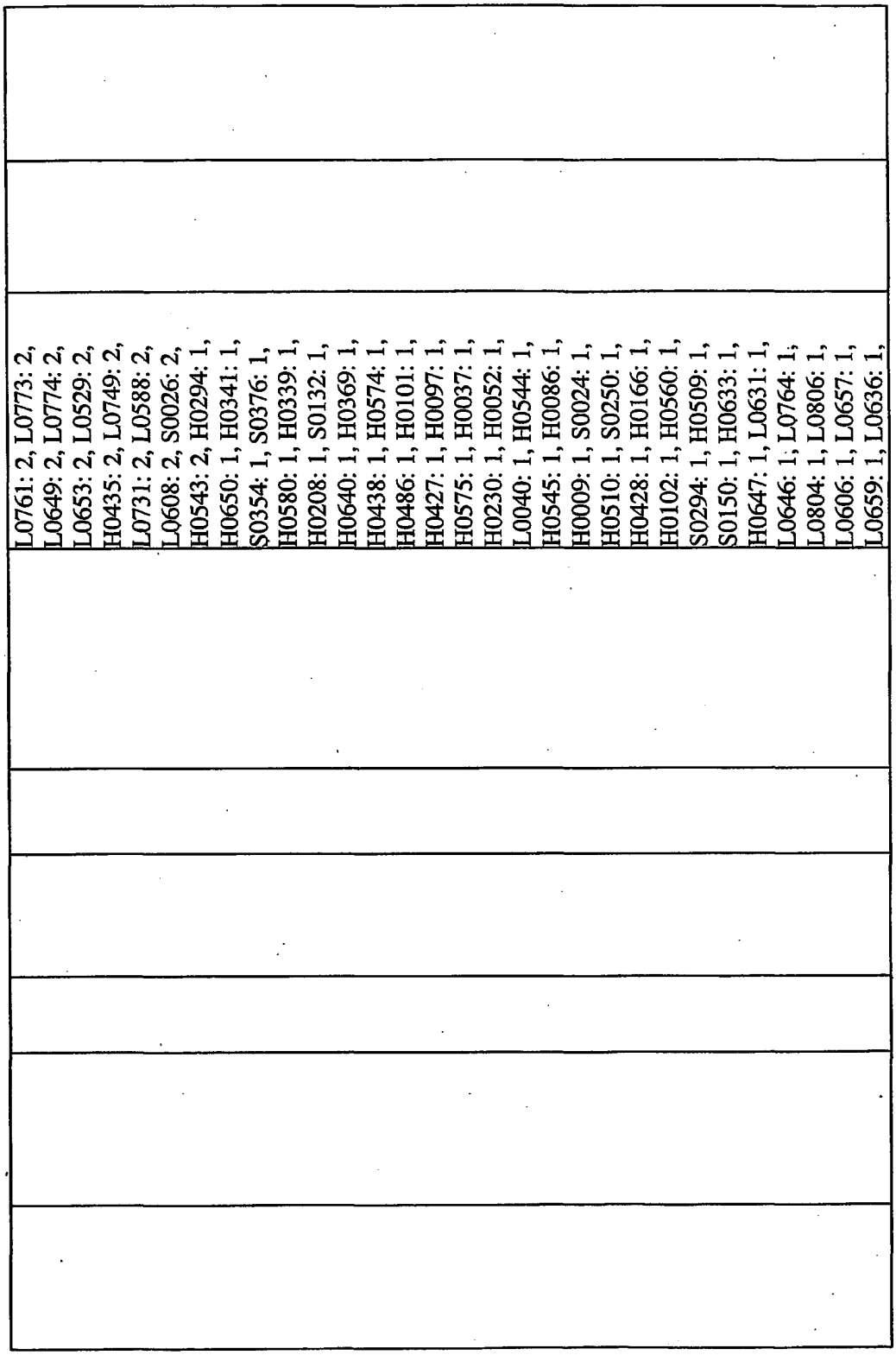
						H0670: 1, H0672: 1, H0521: 1, S0027: 1, L0741: 1, L0754: 1, L0749: 1, L0780: 1, H0422: 1 and H0352: 1.		
HVVDN29	HVVDN29R	2162	2 - 685	4337	Asp-50 to Gly-55.			
HVVDN77	HVVDN77R	2163	1 - 594	4338				
HVVDP70	HVVDP70R	2164	40 - 354	4339	Lys-24 to Glu-34, Pro-47 to Arg-56, Tyr-77 to Pro-90.			
HVVDQ46	HVVDQ46R	2165	106 - 423	4340	Lys-12 to Thr-18, Glu-20 to Lys-26, Lys-83 to Lys-90.	H0551: 9, L0662: 9, L0471: 8, L0754: 7, L0766: 6, L0666: 6, S0358: 5, L0663: 5, L0750: 5, L0779: 5, S0007: 4, H0373: 4, L0770: 4, L0803: 4, L0777: 4, L0752: 4, L0757: 4, L0758: 4, S0114: 3, S0212: 3, H0673: 3, H0412: 3, L0769: 3, L0805: 3, L0776: 3, L0809: 3, S0126: 3, L0740: 3, H0506: 3, H0657: 2, S0116: 2, S0356: 2, S0360: 2, H0411: 2, H0390: 2, H0318: 2, S0214: 2, H0644: 2, H0617: 2, H0494: 2,		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L0608: 2, S0026: 2,
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L0040: 1, H0544: 1,
H0545: 1, H0086: 1,
H0009: 1, S0024: 1,
H0510: 1, S0250: 1,
H0428: 1, H0166: 1,
H0102: 1, H0560: 1,
S0294: 1, H0509: 1,
S0150: 1, H0633: 1,
H0647: 1, L0631: 1,
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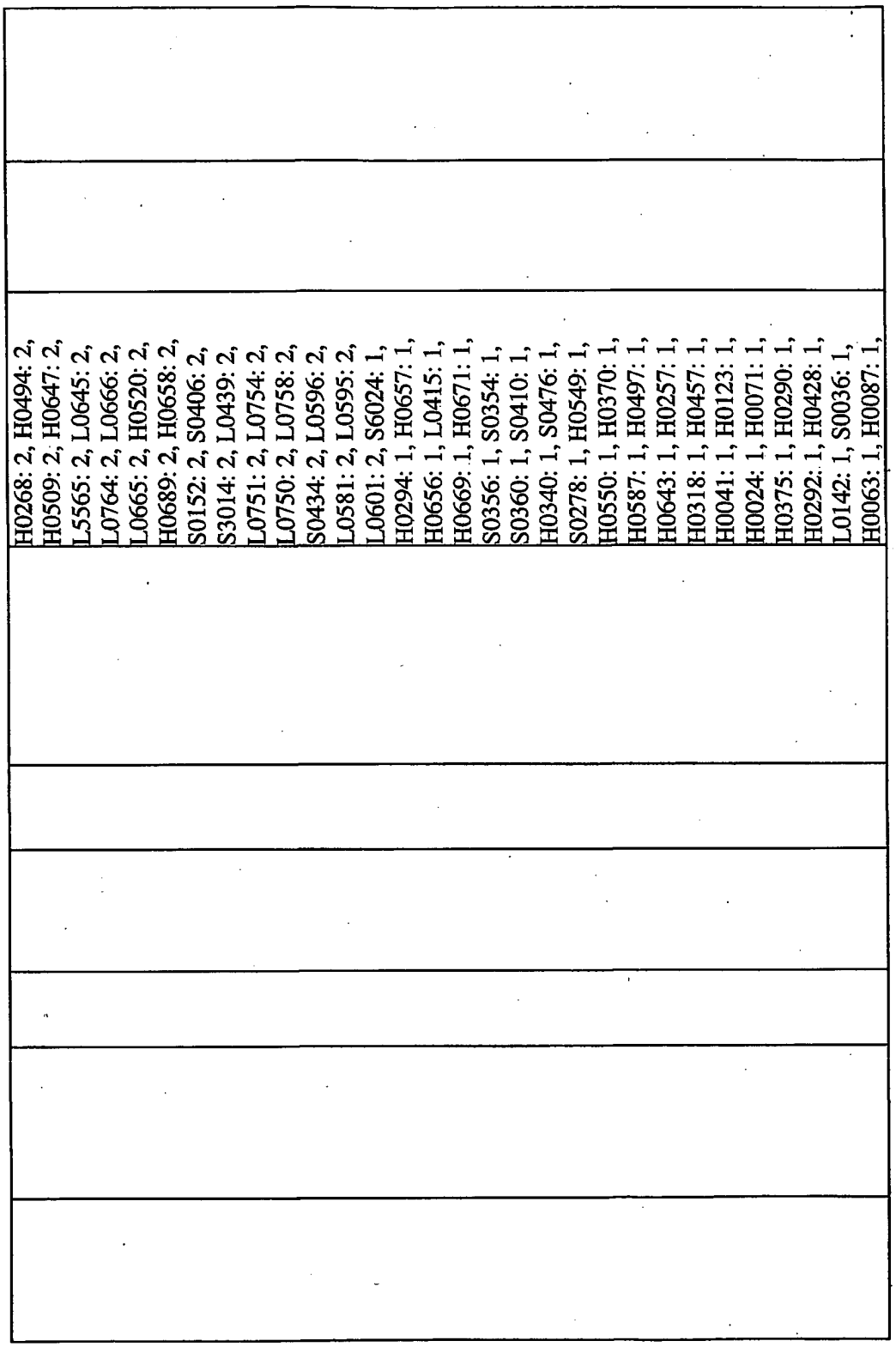
		4341				
		2 - 103				
		2166				
	HVVDQ49R					
HVVDQ49						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L0665: 2, H0520: 2,
H0689: 2, H0658: 2,
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S3014: 2, L0439: 2,
L0751: 2, L0754: 2,
L0750: 2, L0758: 2,
S0434: 2, L0596: 2,
L0581: 2, L0595: 2,
L0601: 2, S6024: 1,
H0294: 1, H0657: 1,
H0656: 1, L0415: 1,
H0669: 1, H0671: 1,
S0356: 1, S0354: 1,
S0360: 1, S0410: 1,
H0340: 1, S0476: 1,
S0278: 1, H0549: 1,
H0550: 1, H0370: 1,
H0587: 1, H0497: 1,
H0643: 1, H0257: 1,
H0318: 1, H0457: 1,
H0041: 1, H0123: 1,
H0024: 1, H0071: 1,
H0375: 1, H0290: 1,
H0292: 1, H0428: 1,
L0142: 1, S0036: 1,
H0063: 1, H0087: 1,

					H0264: 1, H0059: 1, H0100: 1, S0448: 1, S0450: 1, S0440: 1, H0646: 1, S0144: 1, S0002: 1, L0762: 1, L0640: 1, L0639: 1, L0637: 1, L0372: 1, L0643: 1, L0771: 1, L0773: 1, L0648: 1, L0386: 1, L0774: 1, L0775: 1, L0375: 1, L0376: 1, L0378: 1, L0806: 1, L0653: 1, L0776: 1, L0782: 1, L0383: 1, L0791: 1, H0693: 1, H0547: 1, H0519: 1, H0435: 1, H0660: 1, H0672: 1, S0330: 1, H0696: 1, H0134: 1, H0478: 1, S0028: 1, L0743: 1, L0745: 1, L0747: 1, L0749: 1, L0731: 1, S0436: 1, L0593: 1, H0667: 1, H0543: 1, H0423: 1 and H0352: 1.		
HVVDS12	HVVDS12R	2167	1 - 732	4342				
HVVDS21	HVVDS21R	2168	2 - 730	4343			AR104: 17, AR089: 10, AR096: 10, AR061: 8, AR060: 4, AR055:	

HVVDS35	HVVDS35R	2169	2 - 640	4344		4	S0412: 22, L0662: 19, L0777: 14, S0010: 11, S0222: 9, S6028: 9, L0750: 9, T0010: 8, L0659: 8, L0747: 8, L0756: 8, L0663: 7, L0439: 7, H0051: 6, L0518: 6, L0754: 6, L0752: 6, S0280: 5, H0575: 5, S0358: 4, S0346: 4, L0753: 4, H0170: 3, H0662: 3, S0360: 3, H0427: 3, L0471: 3, H0373: 3, L0638: 3, L0637: 3, L0764: 3, L0774: 3, L0809: 3, L0666: 3, S0310: 3, H0672: 3, H0696: 3, L0731: 3, H0506: 3, H0713: 2, S0408: 2, H0411: 2, H0455: 2, H0574: 2, S0414: 2, H0486: 2, H0036: 2, S0049: 2, H0052: 2, H0327: 2, H0687: 2, H0428: 2, H0553: 2, H0644: 2, H0038: 2, L0520: 2,	

		L0762: 2, L0770: 2, L0653: 2, L0517: 2, S0044: 2, L0442: 1, H0583: 1, L0443: 1, S0110: 1, S0282: 1, S0400: 1, H0661: 1, S0348: 1, S0356: 1, S0444: 1, H0329: 1, S0007: 1, H0619: 1, S6026: 1, S0300: 1, L0717: 1, S6022: 1, H0550: 1, H0592: 1, H0587: 1, H0599: 1, H0042: 1, H0590: 1, H0318: 1, H0309: 1, H0545: 1, H0563: 1, H0564: 1, H0123: 1, H0019: 1, S0050: 1, L0163: 1, S0388: 1, H0356: 1, H0328: 1, H0688: 1, H0039: 1, T0023: 1, H0031: 1, H0111: 1, H0169: 1, S0364: 1, L0455: 1, H0135: 1, H0163: 1, T0067: 1, T0069: 1, T0004: 1, H0100: 1, S0112: 1, L0370: 1, L0598: 1, L0769: 1, L0630: 1, L0800: 1,			

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						Thr-35 to Asn-41.	
					4345		
					231 - 353		
					2170		
					HVVDT25R		
					HVVDT25		

HVVDT29	HVVDT29R	2171	109 - 471	4346				
HVVDT44	HVVDT44R	2172	2 - 460	4347	Glu-11 to Arg-17, Arg-66 to Pro-79, Ser-104 to Gln-112, Ser-116 to Ser-125.	L0748: 11, L0758: 10, L0747: 8, L0439: 7, H0144: 6, L0805: 5, L0662: 4, H0341: 3, H0052: 3, L0794: 3, L0803: 3, L0809: 3, H0672: 3, L0741: 3, L0752: 3, H0619: 2, S0222: 2, H0013: 2, H0014: 2, H0266: 2, H0553: 2, L0455: 2, H0591: 2, L0770: 2, L0646: 2, L0764: 2, L0666: 2, L0665: 2, H0547: 2, S0126: 2, L0596: 2, L0589: 2, L0605: 2, H0543: 2, H0423: 2, H0624: 1, H0556: 1, H0686: 1, S0040: 1, H0717: 1, H0671: 1, S0476: 1, L0717: 1, H0411: 1, H0586: 1, H0333: 1, H0574: 1, L0021: 1, H0575: 1, H0618: 1, S0010: 1, H0318: 1, H0544: 1, H0009: 1, H0050: 1, L0471: 1, L0163: 1, S6028: 1,		

						S0022: 1, S0214: 1, H0628: 1, L0456: 1, S0366: 1, S0036: 1, H0090: 1, H0038: 1, H0040: 1, H0551: 1, H0264: 1, H0059: 1, S0112: 1, T0041: 1, H0647: 1, H0652: 1, S0426: 1, L0763: 1, L0638: 1, L0796: 1, L0630: 1, L0768: 1, L0649: 1, L0774: 1, L0378: 1, L0653: 1, L0657: 1, L0659: 1, L0783: 1, L0647: 1, L0791: 1, L0663: 1, L0664: 1, S0053: 1, H0519: 1, H0539: 1, H0696: 1, S0406: 1, H0555: 1, H0627: 1, L0744: 1, L0754: 1, L0746: 1, L0759: 1, S0031: 1, L0584: 1, L0608: 1, L0594: 1, S0026: 1, H0665: 1, H0136: 1, H0216: 1 and H0422: 1.	H0672: 2 and S6028: 1.	
					Asn-1 to Leu-6.		
				4348			
			328 - 600				
		2173					
	HVVDU49R						
HVVDU49							

HVVDW02	HVVDW02R	2174	3 - 266	4349					
HVVDW61	HVVDW61R	2175	2 - 502	4350	Ser-1 to Pro-9.				
HVVDX40	HVVDX40R	2176	294 - 455	4351					
HVVDX90	HVVDX90R	2177	14 - 511	4352					
HWHHD07	HWHHD07R	2178	2 - 391	4353					
HWLAC51	HWLAC51R	2179	11 - 178	4354					
HWLJR51	HWLJR51R	2180	167 - 343	4355		L0766: 3, H0651: 2, H0686: 1, H0656: 1, S0358: 1, L0773: 1, L0775: 1, L0657: 1, L0809: 1, L0792: 1 and L0731: 1.			
HWLME48	HWLME48R	2181	3 - 197	4356	Lys-1 to Asp-8, Lys-41 to Gln-50.	S0152: 7, L0601: 4, H0013: 3, H0551: 3, H0264: 3, H0521: 3, S0046: 2, H0050: 2, H0266: 2, S0022: 2, H0031: 2, H0644: 2, H0494: 2, H0519: 2, H0556: 1, S0040: 1, T0049: 1, S0001: 1, S0356: 1, S0354: 1, S0376: 1, S0045: 1, S0132: 1, H0549: 1,			

HWLVY65	HWLVY65R	2182	209 - 373	4357		H0550: 1, H0486: 1, T0039: 1, T0040: 1, S0280: 1, H0042: 1, H0575: 1, T0082: 1, H0421: 1, L0471: 1, H0373: 1, H0051: 1, H0355: 1, H0615: 1, H0622: 1, L0483: 1, S0364: 1, H0591: 1, H0268: 1, H0561: 1, S0210: 1, L0364: 1, L0649: 1, L0538: 1, L0659: 1, S0428: 1, H0144: 1, L0602: 1, S0390: 1, S0028: 1, L0758: 1, S0434: 1, L0485: 1 and H0543: 1.			
HWMIB35	HWMIB35R	2183	1 - 435	4358	Cys-6 to Ser-12, Gln-27 to Glu-32, Arg-52 to Arg-67, Asp-140 to Asp-145.				
HWNFO25	HWNFO25R	2184	43 - 210	4359	Thr-26 to Ile-34.				

	A										
HWWEF90	HWWEF90R	2185	1 - 300	4360							

[0040] The first column in Table 1 provides a unique "Clone ID NO:Z" for a cDNA clone related to each contig sequence disclosed in Table 1. This clone ID references the cDNA clone which contains at least the 5' most sequence of the assembled contig, and at least a portion of SEQ ID NO:X was determined by directly sequencing the referenced clone. The reference clone may have more sequence than described in the sequence listing or the clone may have less. In the vast majority of cases, however, the clone is believed to encode a full-length polypeptide. In the case where a clone is not full-length, a full-length cDNA can be obtained by methods known in the art and/or as described elsewhere herein.

[0041] The second column in Table 1 provides a unique "Contig ID" identification for each contig sequence. The third column provides the "SEQ ID NO:X" identifier for each of the ovarian associated contig polynucleotide sequences disclosed in Table 1. The fourth column, "ORF (From-To)", provides the location (i.e., nucleotide position numbers) within the polynucleotide sequence "SEQ ID NO:X" that delineate the preferred open reading frame (ORF) shown in the sequence listing and referenced in Table 1, column 5, as SEQ ID NO:Y. Where the nucleotide position number "To" is lower than the nucleotide position number "From", the preferred ORF is the reverse complement of the referenced polynucleotide sequence.

[0042] The fifth column in Table 1 provides the corresponding SEQ ID NO:Y for the polypeptide sequence encoded by the preferred ORF delineated in column 4. In one embodiment, the invention provides an amino acid sequence comprising, or alternatively consisting of, a polypeptide encoded by the portion of SEQ ID NO:X delineated by "ORF (From-To)". Also provided are polynucleotides encoding such amino acid sequences and the complementary strand thereto.

[0043] Column 6 in Table 1 lists residues comprising epitopes contained in the polypeptides encoded by the preferred ORF (SEQ ID NO:Y), as predicted using the algorithm of Jameson and Wolf, (1988) Comp. Appl. Biosci. 4:181-186. The Jameson-Wolf antigenic analysis was performed using the computer program PROTEAN (Version 3.11 for the Power MacIntosh, DNASTAR, Inc., 1228 South Park Street Madison, WI). In specific embodiments, polypeptides of the invention comprise, or alternatively consist of, at least one, two, three, four, five or more of the predicted epitopes as described in Table 1. It

will be appreciated that depending on the analytical criteria used to predict antigenic determinants, the exact address of the determinant may vary slightly.

[0044] Column 7 in Table 1 provides an expression profile and library code: count for each of the contig sequences (SEQ ID NO:X) disclosed in Table 1, which can routinely be combined with the information provided in Table 4 and used to determine the normal or diseased tissues, cells, and/or cell line libraries which predominantly express the polynucleotides of the invention. The first number in column 7 (preceding the colon), represents the tissue/cell source identifier code corresponding to the code and description provided in Table 4. For those identifier codes in which the first two letters are not "AR", the second number in column 7 (following the colon) represents the number of times a sequence corresponding to the reference polynucleotide sequence was identified in the tissue/cell source. Those tissue/cell source identifier codes in which the first two letters are "AR" designate information generated using DNA array technology. Utilizing this technology, cDNAs were amplified by PCR and then transferred, in duplicate, onto the array. Gene expression was assayed through hybridization of first strand cDNA probes to the DNA array. cDNA probes were generated from total RNA extracted from a variety of different tissues and cell lines. Probe synthesis was performed in the presence of ^{33}P dCTP, using oligo(dT) to prime reverse transcription. After hybridization, high stringency washing conditions were employed to remove non-specific hybrids from the array. The remaining signal, emanating from each gene target, was measured using a Phosphorimager. Gene expression was reported as Phosphor Stimulating Luminescence (PSL) which reflects the level of phosphor signal generated from the probe hybridized to each of the gene targets represented on the array. A local background signal subtraction was performed before the total signal generated from each array was used to normalize gene expression between the different hybridizations. The value presented after "[array code]:" represents the mean of the duplicate values, following background subtraction and probe normalization. One of skill in the art could routinely use this information to identify normal and/or diseased tissue(s) which show a predominant expression pattern of the corresponding polynucleotide of the invention or to identify polynucleotides which show predominant and/or specific tissue and/or cell expression. The sequences disclosed herein have been determined to be

predominantly expressed in ovarian tissues, including normal and diseased ovarian tissues (See Table 1, column 7 and Table 4).

[0045] Column 8 in Table 1 provides a chromosomal map location for certain polynucleotides of the invention. Chromosomal location was determined by finding exact matches to EST and cDNA sequences contained in the NCBI (National Center for Biotechnology Information) UniGene database. Each sequence in the UniGene database is assigned to a "cluster"; all of the ESTs, cDNAs, and STSs in a cluster are believed to be derived from a single gene. Chromosomal mapping data is often available for one or more sequence(s) in a UniGene cluster; this data (if consistent) is then applied to the cluster as a whole. Thus, it is possible to infer the chromosomal location of a new polynucleotide sequence by determining its identity with a mapped UniGene cluster.

[0046] A modified version of the computer program BLASTN (Altshul et al., J. Mol. Biol. 215:403-410 (1990), and Gish et al., Nat. Genet. 3:266-272 (1993)) was used to search the UniGene database for EST or cDNA sequences that contain exact or near-exact matches to a polynucleotide sequence of the invention (the 'Query'). A sequence from the UniGene database (the 'Subject') was said to be an exact match if it contained a segment of 50 nucleotides in length such that 48 of those nucleotides were in the same order as found in the Query sequence. If all of the matches that met this criteria were in the same UniGene cluster, and mapping data was available for this cluster, it is indicated in Table 1 under the heading "Cytologic Band". Where a cluster had been further localized to a distinct cytologic band, that band is disclosed; where no banding information was available, but the gene had been localized to a single chromosome, the chromosome is disclosed.

[0047] Once a presumptive chromosomal location was determined for a polynucleotide of the invention, an associated disease locus was identified by comparison with a database of diseases which have been experimentally associated with genetic loci. The database used was the Morbid Map, derived from OMIM™ (*supra*). If the putative chromosomal location of a polynucleotide of the invention (Query sequence) was associated with a disease in the Morbid Map database, an OMIM reference identification number was noted in column 9, Table 1, labeled "OMIM Disease Reference(s)". Table 5 is a key to the OMIM reference identification numbers (column 1), and provides a description of the associated disease in Column 2.

TABLE 2

Clone ID NO:Z	Contig ID:	SEQ ID NO: X	Analysis Method	PFam/NR Description	PFam/NR Accession Number	Score/ Percent Identity	NT From	NT To
HOVCD34	396327	11	blastx.2	(AK000844) unnamed protein product [Homo sapiens]	dbj|BAA91396.1|	58%	319	167
HEBGD58	498281	12	blastx.2	eggshell protein - fluke (Schistosoma haematobium) (subclone 1	pir|A44805|A44805	74%	3	98
HETCD42	533532	13	blastx.2	actin capping protein alpha subunit [Homo sapiens]	gb|AAA88848.1|	100%	90	947
HTXKC18	535854	14	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	62%	873	676
HLDRK20	553765	15	blastx.2	complement factor B [Homo sapiens]	emb|CAA51389.1|	91%	150	1283
H2MBD33	558474	16	blastx.2	NBR2 PROTEIN (NEXT TO BRCA1 GENE 2 PROTEIN).	sp|O15453|NBR2_HUMAN	100%	138	290
HSYBX61	558708	17	blastx.2	N-cadherin [Homo sapiens]	gb|AAA03236.1|	98%	3	515
HELHC03	562745	18	blastx.2	(AF118082) PRO1902 [Homo sapiens]	gb|AAF22026.1|AF118094_21	67% 81%	1063 1154	905 1089
HOFMP70	585385	19	blastx.2	precursor polypeptide	emb|CAA33261.1|	75%	120	347

				(AA -21 to 782) [Homo sapiens]				
HSKNZ25	585675	20	blastx.2	unknown protein [Homo sapiens]	gb|AAA88038.1|	63%	522	686
HDPFK39	588869	21	blastx.2	leukocyte adhesion glycoprotein precursor [Homo sapiens]	gb|AAA59491.1|	99% 90%	79 681	687 746
HL1AB07	638220	22	blastx.2	(AF151884) CGI-126 protein [Homo sapiens]	gb|AAD34121.1|AF151884_1	100% 91%	2 463	466 498
HHGAS83	654868	23	blastx.2	(AF044671) MM46 [Homo sapiens]	gb|AAD02337.1|	100%	133	393
HTSGU37	704405	24	blastx.2	(AF019406) collagen type IX alpha 2 chain [Homo sapiens]	gb|AAC33512.1|	100% 50% 51% 40% 51% 52% 53% 47% 54% 46% 52% 47% 48% 38% 48% 50% 46% 37% 49%	117 192 189 12 192 195 192 156 189 156 195 195 192 15 192 195 192 15 195	434 434 431 434 431 431 431 431 431 431 431 431 431 431 431 434 431 431 431

431	195	48%				
431	201	50%				
431	24	37%				
431	189	48%				
431	189	48%				
431	180	44%				
434	195	46%				
425	192	43%				
461	195	40%				
434	195	43%				
413	195	48%				
395	45	34%				
365	192	44%				
431	195	36%				
347	192	47%				
502	395	47%				
490	395	59%				
481	383	44%				
472	401	52%				
481	401	46%				
481	383	38%				
481	395	43%				
481	383	40%				
481	383	38%				
502	380	33%				
487	422	47%				
457	419	61%				
432	331	29%				
218	430	52%				
133	249	37%				

						38%	240	100
						50%	471	418
						32%	501	421
H2LAN34	705692	25	blastx.2	unnamed protein product [unidentified]	emb|CAB42187.1|	64%	14	199
HPMBZ40	711500	26	blastx.2	fusion protein: ubiquitin (bases 43_513); ribosomal protein S27a (bases 217_532) [Rattus norvegicus]	emb|CAA57432.1|	87%	402	563
HLYEP52	732342	27	blastx.2	tyrosine kinase activator protein 1 (TKA-1) [Homo sapiens]	emb|CAA90511.1|	95%	101	580
						92%	585	1007
						51%	149	547
						35%	619	1008
						32%	619	1008
						38%	775	846
HTTEC47	745343	28	blastx.2	unknown protein [Homo sapiens]	gb|AAA88038.1|	73%	696	232
						77%	229	20
						63%	902	627
HOFMO90	746416	29	blastx.2	(AF046001) zinc finger transcription factor [Homo sapiens]	gb|AAC78561.1|	89%	122	367
						70%	348	440
HCHND34	762806	30	blastx.2	cytochrome oxidase subunit III [Phoca vitulina]	emb|CAA45263.1|	81%	12	497
						86%	500	778

HAMGI86	785328	31	blastx.2	unnamed protein product [unidentified]	emb|CAB42212.1|	91% 94%	424 611	609 667
HLWCN67	794213	32	blastx.2	(AK014485) putative [Mus musculus]	dbj|BAB29387.1|	80%	386	631
HOFAC09	806819	33	blastx.2	acidic ribosomal phosphoprotein (P0) [Homo sapiens]	gb|AAA36470.1|	87% 52%	42 5	812 55
HRDEL61	824886	34	blastx.2	X-linked retinopathy protein [C-terminal, clone XEH.8c] [human, Peptide Partial, 100 aa] [Homo sapiens]	gb|AAB26149.1|	67% 45%	808 644	632 576
HDPOR60	828176	35	blastx.2	(AF151799) CGI-40 protein [Homo sapiens]	gb|AAD34036.1|AF151799_1	96% 82%	8 8	1867 1867
HPRTS71	828574	36	blastx.2	rTSbeta [Homo sapiens]	emb|CAA61761.1|	100%	45	458
HOHBI90	828862	37	blastx.2	tyrosine kinase receptor [Homo sapiens]	gb|AAA61243.1|	90% 63% 34% 53%	193 159 268 375	417 281 396 419
HOHAL47	828872	38	blastx.2	pericentriol material 1 [Homo sapiens]	gb|AAA60120.1|	88%	328	879
HYASE58	829298	39	blastx.2	O-6-methylguanine-DNA methyltransferase [Homo sapiens]	gb|AAA59594.1|	99%	74	694
HKAAH95	829958	40	blastx.2	ribosomal protein L22	emb|CAA55204.1|	70%	41	418

				[Rattus norvegicus]					
HTTIQ02	829981	41	blastx.2	activating transcription factor 3 [Homo sapiens]	gb|AAA20506.1|	96%	44		391
HWACG91	830195	42	blastx.2	heat shock protein 90, hsp90 [rats, brain, Peptide, 724 aa] [Rattus sp.]	gb|AAB23369.1|	82%	119		610
						93%	88		132
						37%	60		170
						76%	573		611
HUFBX52	830497	43	blastx.2	tenascin X [Homo sapiens]	gb|AAB47488.1|AAB47488	99%	2		1525
						100%	1525		1785
						29%	20		1255
						26%	20		1114
						30%	20		1033
						27%	17		991
						29%	20		988
						28%	17		934
						25%	20		1096
						27%	8		898
						28%	2		973
						28%	14		856
						27%	20		892
						28%	17		712
						29%	20		712
						24%	365		1150
						24%	20		973
						32%	413		946
						29%	11		907
						24%	2		991
						30%	20		589
						32%	17		589

712	20	29%				
601	20	27%				
856	2	27%				
1111	716	31%				
1012	176	25%				
562	176	30%				
1096	437	25%				
565	92	29%				
1135	521	25%				
1045	437	23%				
1096	434	23%				
1231	488	20%				
1141	860	25%				
1111	557	22%				
1153	860	25%				
1309	557	24%				
1135	809	28%				
1117	641	20%				
1021	437	27%				
604	437	39%				
1690	1487	36%				
1096	557	27%				
1684	1487	28%				
1135	788	23%				
1309	809	22%				
1684	1487	30%				
877	638	33%				
331	35	29%				
1045	455	23%				
1684	1487	28%				

					27%	1487		1684
					30%	622		825
					25%	1487		1684
					37%	1556		1690
					28%	1487		1684
					23%	1487		1690
					27%	316		501
					48%	1110		1190
					30%	962		1150
					64%	1101		1142
					32%	267		404
					26%	52		498
					52%	1607		1663
					32%	1089		1181
					32%	1089		1181
					22%	650		1027
					53%	1398		1436
					60%	1089		1118
					41%	189		257
					29%	118		255
					37%	979		1083
					29%	1024		1146
					35%	361		480
					34%	1050		1175
HWLJE49	831453	44	blastx.2	2A9 peptide [Homo sapiens]	gb|AAA35886.1|	98%	46	315
HLQBT44	832454	45	blastx.2	precursor polypeptide [Homo sapiens]	emb|CAA28169.1|	100%	175	357
						92%	143	181
HSLGG58	833088	46	blastx.2	(AF096304) putative sterol reductase SR-1	gb|AAD09765.1|	100%	134	997
						97%	1018	1305

				[Homo sapiens]		61%	976	1029
HCHBQ33	840756	47	blastx.2	(AB005624) rig-analog DNA-binding protein [Sus scrofa]	dbj|BAA21510.1|	95% 100%	157 48	480 170
HDTMK30	840862	48	blastx.2	cysteine-rich intestinal protein [Homo sapiens]	gb|AAB61158.1|	100%	123	353
HDPFX64	841088	49	blastx.2	quinone oxidoreductase [Homo sapiens]	gb|AAA60239.1|	100%	404	1096
HODFG71	843485	50	blastx.2	(AF081114) ORF2 [Mus musculus domesticus]	gb|AAC72810.1|	29% 34% 50% 41% 34%	1121 591 281 1188 860	834 301 198 1102 717
HCE3165	844534	51	blastx.2	kinesin-like motor protein KIF1C [Homo sapiens]	gb|AAC52117.1|	100%	11	172
HSAVH65	847355	52	blastx.2	plasmolipin [Rattus norvegicus]	emb|CAA90017.1|	48%	11	382
HBXFT41	847647	53	blastx.2	P26s4 [Cricetinae gen. sp.]	gb|AAB34132.1|	93%	707	805
HBMCM38	847821	54	blastx.2	(AF161356) HSPC093 [Homo sapiens]	gb|AAF28916.1|AF161356_1	55% 71% 59%	406 485 333	266 390 268

						63%	534	502
HACBO42	849064	55	blastx.2	G-protein coupled receptor, SREB1 - human	pir|JC7287|JC7287	57%	3	368
HODBF86	859572	56	blastx.2	(AF123880) gag polyprotein [multiple sclerosis associated retrovirus element]	gb|AAD48374.1|	40% 35%	225 542	437 652
HOABP90	859622	57	blastx.2	(AF089895) cAMP-dependent protein kinase subunit R2 beta [Oryctolagus cuniculus]	gb|AAF00037.1|	97%	628	735
HE8UE42	862010	58	blastx.2	(AJ224875) glucosyltransferase [Homo sapiens]	emb|CAA12176.1|	99%	15	1610
HUSJJ59	862481	59	blastx.2	(AF070661) HSPC005 [Homo sapiens]	gb|AAD20967.1|	100%	80	316
HSSDM07	863515	60	blastx.2	TcD37 homolog [Homo sapiens]	gb|AAF04914.1|U67085_1	94% 95% 95%	224 647 160	691 1090 225
HBCBW52	866444	61	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	69%	1498	1202
HOGAS18	867969	62	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	79%	508	380
HHSDL18	869701	63	blastx.2	(AF118082) PRO1902 [Homo sapiens]	gb|AAF22026.1|AF118094_21	65% 61% 67%	590 429 317	721 536 427

HLDOG81	874506	65	blastx.2	(AF153191) nm23-H7 [Homo sapiens]	gb|AAD34622.1|AF153191_1	100% 29%	1232 1208	798 813
HTXQF81	874608	66	blastx.2	A4 protein [Homo sapiens]	gb|AAA35499.1|	100%	173	628
HCRNG90	874787	67	blastx.2	5'-nucleotidase [Homo sapiens]	emb|CAA39271.1|	98%	156	911
HPWCL64	874891	68	blastx.2	SPIN protein [Homo sapiens]	emb|CAA75163.1|	93%	44	643
HWLMV62	874930	69	blastx.2	(AL137608) hypothetical protein [Homo sapiens]	emb|CAB70840.1|	31%	104	397
H2MAC06	874931	70	blastx.2	neutrophil gelatinase associated lipocalin [Homo sapiens]	emb|CAA58127.1|	100%	170	763
HWLRF06	875093	71	blastx.2	GCP170 [Homo sapiens]	dbj|BAA23661.1|	60% 53%	23 3	373 383
HODDO41	875352	72	blastx.2	(AF064604) KE03 protein [Homo sapiens]	gb|AAC17109.1|	80%	350	454
HCHMQ74	875371	73	blastx.2	(AK001527) unnamed protein product [Homo sapiens]	dbj|BAA91741.1|	97%	3	440
HT3AI55	875682	74	blastx.2	(AK000219) unnamed protein product [Homo sapiens]	dbj|BAA91018.1|	98%	4	504
HMVBD68	876052	75	blastx.2	catalase [Campylobacter jejuni]	emb|CAA59444.1|	85%	207	103
HOCTA74	876487	76	blastx.2	propionyl-CoA carboxylase [Homo sapiens]	emb|CAA32763.1|	100%	65	292

HISET05	876686	77	blastx.2	(AJ270993) homeobox protein [Homo sapiens]	emb|CAB65909.1|	95% 66%	511 801	849 926
HCRQM22	876696	78	blastx.2	hepatocyte nuclear factor-3/fork head homolog 11B [Homo 1	gb|AAC51129.1|	84%	3	401
HLHTC92	877310	79	blastx.2	neuronal PAS2 [Homo sapiens]	gb|AAB47250.1|	97% 95% 32%	197 142 482	418 201 574
H2CAA49	879484	80	blastx.2	(AF053651) cellular apoptosis susceptibility protein [Homo sapiens]	gb|AAC35297.1|	100%	954	2108
HETKQ94	880545	81	blastx.2	(AL132954) putative protein [Arabidopsis thaliana]	emb|CAB75750.1|	35% 23% 33%	53 1556 1155	838 2080 1298
HOFMO23	882466	82	blastx.2	(AF089745) FK506-binding protein [Homo sapiens]	gb|AAC78853.1|	95% 54% 46% 52%	14 14 14 194	499 499 454 499
HNTNP58	882787	83	blastx.2	(AF118082) PRO1902 [Homo sapiens]	gb|AAF22026.1|AF1 18094_21	62% 60%	2230 2382	2391 2480
HOFNY28	888480	84	blastx.2	AF-1 [Homo sapiens]	gb|AAA16955.1|	63% 62%	18 416	476 658
HE8MQ01	889128	85	blastx.2	(AF118082) PRO1902 [Homo sapiens]	gb|AAF22026.1|AF1 18094_21	71%	2699	2490
HE2RG21	891139	86	blastx.2	peptidylprolyl isomerase [Homo sapiens]	emb|CAA37039.1|	100%	59	553
HHENW77	894855	87	blastx.2	vacuolar proton-ATPase subunit M9.2	emb|CAA75571.1|	71%	99	338

				[Homo sapiens]				
HOFNU55	897344	88	blastx.2	(AP000616) similar to RING-H2 finger protein RHA1a (AF078683) [Oryza sativa]	dbj|BAA85438.1|	70%	654	544
HE8TE40	897862	89	blastx.2	Rabin3 [Rattus norvegicus]	gb|AAA67890.1|	87% 93%	152 1086	1114 1532
HNTCH73	900546	90	blastx.2	bone morphogenetic protein 2B [Homo sapiens]	gb|AAA51835.1|	100%	195	1418
HHFBY53	902534	91	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	95% 22% 20% 22% 20%	6 837 801 833 836	128 956 932 940 955
HDPIE44	904763	92	blastx.2	(AF200706) UNC-84A [Caenorhabditis elegans]	gb|AAF15883.1|AF200706_1	47% 39% 25% 42%	1852 170 1375 109	2418 313 1524 171
HHSAX10	904783	93	blastx.2	delta-9 desaturase [Gallus gallus]	emb|CAA42997.1|	71%	9	680
HPIAX83	906066	94	blastx.2	weakly similar to E. nidulans bimA gene product (SP:P17885) [Caenorhabditis elegans]	gb|AAA81143.1|	39% 37% 19% 22% 21% 24%	1167 588 1776 1716 1653 2274	2459 1025 2474 2186 2093 2540
HOFNG28	908746	95	blastx.2	CD59 GLYCOPROTEIN	sp|O62680|CD59_PIG	54%	51	401

				PRECURSOR (MEMBRANE ATTACK COMPLEX 1 (PROTECTIN).				
HOFOB27	911947	96	blastx.2	(AL050283) hypothetical protein [Homo sapiens]	emb|CAB43384.1|	97% 77% 42%	640 380 329	1491 745 427
HHBHJ45	913831	97	blastx.2	initiation factor 2 [Homo sapiens]	gb|AAA67038.1|	100%	11	1498
HHPDV90	914163	98	blastx.2	(AF090942) PRO0657 [Homo sapiens]	gb|AAF24054.1|AF090942_1	53%	1122	874
HWMMQ47	915068	99	blastx.2	(AB029042) ATPase inhibitor precursor [Homo sapiens]	dbj|BAA88422.1|	100% 100%	53 1614	232 1754
HBGNY08	915214	100	blastx.2	(AP000616) similar to RING-H2 finger protein RHA1a (AF078683) [Oryza sativa]	dbj|BAA85438.1|	95% 100% 100% 100% 77% 90% 84% 44% 33% 35%	423 423 423 423 423 423 421 308 309 332	364 367 367 367 343 364 347 222 229 249
HODGH45	917394	101	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	80%	819	938
HWLKE58	917716	102	blastx.2	(AL031629) similar to RNA recognition motif. (aka RRM, RBD, or 1 1	emb|CAA20980.2|	52%	275	496

HRADL40	919433	103	blastx.2	dodecenoyl-CoA delta-isomerase [Homo sapiens]	emb|CAA81066.1|	100%	37	942
HOFMP73	919895	104	blastx.2	cathepsin B [Homo sapiens]	gb|AAC37547.1|	85%	113	1129
HOFMS02	920253	105	blastx.2	ATPase subunit 6 [Phoca vitulina]	emb|CAA45262.1|	54%	156	386
HUVHD12	921707	106	blastx.2	inositol polyphosphate 4-phosphatase [Rattus norvegicus]	gb|AAB01069.1|	35% 30% 60%	187 687 43	492 953 102
HMVDQ41	922191	107	blastx.2	(AL137496) hypothetical protein [Homo sapiens]	emb|CAB70771.1|	98% 99%	384 2	809 385
HODGI03	922879	108	blastx.2	replication protein A 14kDa subunit [Homo sapiens]	gb|AAA58350.1|	100%	447	635
HODHD14	922955	109	blastx.2	unknown protein [Homo sapiens]	gb|AAA88036.1|	60%	22	174
HODDC03	925296	110	blastx.2	ORF4 [Rattus norvegicus]	emb|CAA37647.1|	40% 58% 50%	126 344 307	245 433 336
HVCAG04	925735	111	blastx.2	(AF034633) GPR39 [Homo sapiens]	gb|AAC26082.1|	100% 29%	1281 1364	781 1293
HCRCE02	925837	112	blastx.2	putative p150 [Homo sapiens]	gb|AAC51269.1|	47% 50% 31% 40%	1 709 329 876	489 867 607 971
HHERA91	926067	113	blastx.2	(AK000530) unnamed protein product [Homo	dbj|BAA91234.1|	100%	2031	2399

				sapiens]				
HAGDL82	928396	114	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	75% 75%	5 210	208 257
HWBDS34	930484	115	blastx.2	Similar to S.cerevisiae hypothetical protein L3111 (S59316) [Homo sapiens]	dbj|BAA13405.1|	99%	57	983
H6ESA39	933568	116	blastx.2	BCDNA:LD21720 PROTEIN.	sp|Q9XZ25|Q9XZ25	47% 26%	623 14	1150 169
HPCOR06	933678	117	blastx.2	ORFII [Homo sapiens]	emb|CAA36480.1|	73% 62% 56% 60%	99 310 28 266	266 459 144 310
HTFNO06	933989	118	blastx.2	(AC009177) unknown protein [Arabidopsis thaliana]	gb|AAF27013.1|AC009177_3	39%	95	505
HODFY08	935520	119	blastx.2	(AB012223) ORF2 [Canis familiaris]	dbj|BAA25253.1|	45%	79	447
HRACK27	935717	120	blastx.2	(AL133045) hypothetical protein [Homo sapiens]	emb|CAB61372.1|	97%	681	1283
HRACW30	940639	121	blastx.2	(AF113887) kappa 1 immunoglobulin light chain [Homo sapiens]	gb|AAD29608.1|	93%	79	786
HOFOC32	941969	122	blastx.2	placental protein Diff33 [Homo sapiens]	emb|CAB09783.1|	84%	84	1502
HTTDM15	942511	123	blastx	(AL033127) hypothetical protein	emb|CAA21869.1|	27% 20%	62 759	427 959

				[Schizosaccharomyces pombe]		32%	965	1048
HOVAY63	944031	124	blastx.2	L1 retroposon, a portion of its ORF2 sequence [Rattus norvegicus]	emb|CAA43593.1|	65% 43% 34%	583 229 492	488 125 376
HDPFY41	946502	125	blastx.2	(AL050294) hypothetical protein [Homo sapiens]	emb|CAB43393.1|	94% 88% 52%	624 1984 2039	2072 2037 2113
HCOPB92	948608	126	blastx.2	ORF2, encodes a reverse transcriptase homolog [Homo sapiens]	gb|AAB60345.1|	60% 51% 66% 64%	99 2 257 169	182 106 310 243
HBJHO83	948708	127	blastx.2	envelope polyprotein [Mus musculus]	gb|AAA37565.1|	46% 45% 85%	177 64 2	365 174 61
HWMEO44	948719	128	blastx.2	(AF038963) RNA helicase [Homo sapiens]	gb|AAD19826.1|	99%	3	1343
HFXJA96	949001	129	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	93%	40	135
HTLGV19	949574	130	blastx.2	human complement C1r [Homo sapiens]	gb|AAA51851.1|	46% 36% 25%	72 604 567	539 732 740
HMSAC18	950257	131	blastx.2	(AB023584) reduced expression in cancer [Homo sapiens]	dbj|BAA88923.1|	100%	29	919
HAPRB43	950475	132	blastx.2	(AF124522) tetraspan NET-2 [Homo sapiens]	gb|AAD17317.1|	100%	3	536

HCCMD55	956895	133	blastx.2	catalase [Campylobacter jejuni]	emb|CAA59444.1|	94%	225	115
HKADF15	960658	135	blastx.2	(AF179370) insulin-like growth factor binding protein 5 protease [Rattus norvegicus]	gb|AAD52683.1|AF179370_1	94% 70% 32%	424 113 9	1551 499 155
HOGES55	961337	136	blastx.2	proline-rich protein [Mus musculus]	gb|AAA53048.1|	31% 33% 33% 33% 33% 27%	515 515 645 809 1099 1099	1117 1117 1397 1117 1452 1557
HKZAJ14	961458	137	blastx.2	(AL133051) hypothetical protein [Homo sapiens]	emb|CAB61378.1|	100%	219	1028
HLHAE14	962362	138	blastx.2	unknown protein [Homo sapiens]	gb|AAA88036.1|	60% 38%	1969 1820	1805 1680
HBCJN16	965190	139	blastx.2	calcyphosine [Homo sapiens]	emb|CAA66609.1|	99%	38	346
HCGAF29	965372	140	blastx.2	(AF083217) WD repeat protein WDR3 [Homo sapiens]	gb|AAD45865.1|AF083217_1	97% 27% 53% 34% 60% 60% 60% 46% 36% 53%	32 473 2270 2226 2269 2273 2272 2269 2226 2270	1660 940 2308 2312 2313 2317 2316 2307 2315 2314

1500

HBJAB02	967807	142	blastx.2	(AK000069) unnamed protein product [Homo sapiens]	dbj|BAA90924.1|	100%	2	1267
HOUCR01	968171	143	blastx.2	similar to D.melanogaster peroxidasin(U11052) [Homo sapiens]	dbj|BAA13219.1|	33% 36% 30%	8 428 8	646 718 241
HDTIG18	968454	144	blastx.2	(AB017644) ubiquitin-conjugating enzyme E2 [Homo sapiens]	dbj|BAA76544.1|	100%	391	1011
HBLGD30	968949	145	blastx.2	preceruloplasmin (EC 1.16.3.1) [Homo sapiens]	gb|AAA51976.1|	100% 40% 41%	1 106 1183	2187 1512 2184
HFIHK04	969387	146	blastx.2	(AK000200) unnamed protein product [Homo sapiens]	dbj|BAA91005.1|	94%	306	151
HE8NQ16	970046	148	blastx.2	F20D12.3 gene product [Caenorhabditis elegans]	gb|AAA81672.1|	38% 36% 25% 25%	359 1259 2021 974	1099 1891 2653 1102
HOFMS34	973010	149	blastx	hPMSR6 [Homo sapiens]	gb|AAA97460.1|	59% 66%	324 552	536 605
HOFOB11	973505	150	blastx.2	15 KD SELENOPROTEIN PRECURSOR.	sp|O60613|SE15_HUMAN	95%	18	503
HTLHN94	974667	151	blastx.2	(AB012955) KIP2 [Homo sapiens]	dbj|BAA33584.1|	99%	444	812
HLDRT31	975754	152	blastx.2	hepatocyte growth	gb|AAA50165.1|	90%	91	639

				factor-like protein [Homo sapiens]		50%	100	579
						44%	100	579
						50%	346	558
HWLHW86	975771	153	blastx.2	epithelial glycoprotein (EGP) precursor [Homo sapiens]	gb|AAA35723.1|	100%	245	1186
HOFNM53	976051	154	blastx.2	(AL110276) hypothetical protein [Homo sapiens]	emb|CAB53711.1|	37%	498	1094
HDPSE86	976207	155	blastx	(AF086713) rasGAP-activating-like protein [Homo sapiens]	gb|AAD09006.1|	83%	757	1311
						91%	1	420
						96%	508	774
						83%	401	511
						30%	361	450
						42%	1	42
HHFOE18	976216	156	blastx.2	(AL117664) hypothetical protein [Homo sapiens]	emb|CAB56034.1|	52%	376	1275
						35%	14	139
HHFNH27	976968	157	blastx.2	Nascent polypeptide associated complex alpha subunit [Homo sapiens]	emb|CAA56869.1|	98%	26	589
						100%	3	26
HMMBZ81	977264	158	blastx.2	alternatively spliced product using exon 13A [Homo sapiens]	gb|AAB49034.1|	52%	545	369
HSLGF32	977704	159	blastx.2	(AL133063) hypothetical protein [Homo sapiens]	emb|CAB61387.1|	52%	2	250
HODFU73	978812	161	blastx.2	myeloid ecotropic viral integration site-1b	gb|AAA85509.1|	94%	371	652

				[Mus musculus]				
HNBUA49	978998	162	blastx.2	(AF085356) putative RNA helicase [Homo sapiens]	gb|AAD40191.1|	97% 38%	365 130	1282 183
HVVDU73	979346	163	blastx.2	ladinin [Homo sapiens]	gb|AAB58817.1|	99%	53	1603
HHESX72	979468	164	blastx.2	(AK001665) unnamed protein product [Homo sapiens]	dbj|BAA91821.1|	96%	202	480
HOCPY88	979547	165	blastx.2	(AF035299) similar to GAP binding protein p62do [Homo sapiens]	gb|AAB88182.1|	100%	136	939
HOGDC64	979666	166	blastx.2	kinase A anchor protein [Homo sapiens]	emb|CAA66000.1|	100% 40% 45%	236 1 40	769 165 204
HSIEA14	980139	167	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	72% 70% 68%	613 783 667	482 673 620
HSPSY43	980269	168	blastx.2	alphaII spectrin [Rattus norvegicus]	emb|CAA62350.1|	100%	937	1659
HSXBH24	981029	169	blastx.2	(AF181645) BcDNA.GH12144 [Drosophila melanogaster]	gb|AAD55431.1|AF181645_1	44% 36% 28% 26% 31% 22% 35% 23%	301 1207 1684 1702 1609 1711 1819 1867	1263 2148 2040 2067 1896 2061 1962 2157
HOFAE61	981108	170	blastx.2	predicted using Genefinder; Similarity to E.coli guanosine-3',	emb|CAB05030.1|	59% 71% 50%	173 5 727	430 88 822

				1 [Caenorhabditis elegans]				
HCFOF82	981272	171	blastx.2	(AL133558) hypothetical protein [Homo sapiens]	emb|CAB63713.1|	98%	2	901
HOCMT79	981309	172	blastx.2	similar to yeast Sec6p, Swiss-Prot Accession Number P32844; 1 1 norvegicus]	gb|AAA85505.1|	94% 96%	481 2	1413 481
HKAEI03	981319	173	blastx.2	Wiskott-Aldrich Syndrome Protein [Mus musculus]	gb|AAC52556.1|	35% 39% 40% 55% 34%	392 233 407 306 288	6 6 300 253 211
HOCPO31	981593	174	blastx.2	(AF015037) endooligopeptidase A related protein; EOPA related protein [Oryctolagus cuniculus]	gb|AAB99905.1|	79%	381	812
HAOTG88	981606	175	blastx.2	No definition line found [Escherichia coli]	gb|AAC43132.1|	100%	217	2
HVCAH21	981768	176	blastx.2	(AF044956) NADH:ubiquinone oxidoreductase B22 subunit [Homo sapiens]	gb|AAD42057.1|AF044956_1	100%	80	616
HFPCK56	981812	177	blastx.2	(AF099664) Cdc42 effector protein 4 [Homo sapiens]	gb|AAD16299.1|	88%	3	125

HAOSJ58	981859	178	blastx.2	(AJ271784) chromokinesin [Homo sapiens]	emb|CAB75427.1|	87%	24	482
HOPJT48	981862	179	blastx.2	(AP000616) similar to RING-H2 finger protein RHA1a (AF078683) [Oryza sativa]	dbj|BAA85438.1|	95%	321	250
						91%	318	247
						95%	316	245
						100%	350	285
						100%	349	284
						100%	348	283
						100%	345	280
						100%	347	282
						100%	346	281
						100%	342	277
						100%	344	279
						100%	343	278
						100%	340	275
						100%	339	274
						100%	341	276
						100%	336	271
						100%	338	273
						100%	337	272
						100%	335	270
						100%	333	268
						100%	334	269
						100%	330	265
						100%	331	266
						100%	332	267
						100%	327	262
						100%	328	263
						100%	329	264

						100%	324	259
						100%	325	260
						91%	313	242
						88%	318	241
						84%	316	239
						64%	318	217
HCFAV61	981914	180	blastx.2	(AK000541) unnamed protein product [Homo sapiens]	dbj|BAA91241.1|	99%	54	1091
HOVJY54	982032	182	blastx.2	similar to cuticle collagen [Caenorhabditis elegans]	emb|CAA91932.1|	36%	593	156
						33%	763	578
						37%	763	635
						29%	1088	942
HE8MM52	982197	184	blastx.2	(AL023828) cDNA EST yk289g5.5 comes from this gene; cDNA EST 1 1 yk653f1.5 comes from this gene; cDNA EST EMBL:C07875 comes from th	emb|CAA19455.1|	48%	628	1137
						46%	121	552
HJBCC19	982465	185	blastx.2	(AK000516) unnamed protein product [Homo sapiens]	dbj|BAA91222.1|	99%	503	949
						90%	8	157
HODAA93	982618	186	blastx.2	(AJ224979) MTMR1 [Homo sapiens]	emb|CAA12271.1|	96%	63	737
						74%	698	790
HSPSI74	982764	187	blastx.2	L6 [Homo sapiens]	gb|AAA36158.1|	100%	100	705
HCEHZ42	983008	188	blastx.2	unknown [murine herpesvirus 68]	gb|AAB66420.1|	32%	2124	3170
						38%	1167	1451
						38%	1167	1451

						38%	1167	1451
						38%	1167	1451
						38%	1167	1451
						32%	2127	2414
						39%	2140	2304
						35%	94	375
						35%	94	375
						35%	94	375
						37%	116	334
						37%	116	334
						37%	116	334
						37%	116	334
						34%	620	817
						34%	620	817
						34%	620	817
						34%	620	817
						37%	7	135
						37%	7	135
						38%	1234	1422
						38%	1234	1422
						38%	1234	1422
HDPVU15	983592	189	blastx.2	replication factor C, 37-kDa subunit [Homo sapiens]	gb|AAB09785.1|	100%	72	686
						100%	685	954
						100%	1025	1138
						100%	1216	1308
HT5GC28	984008	190	blastx.2	alpha subunit; forms heterodimer with NC2 alpha/Dr1 [Homo sapiens]	emb|CAA65358.1|	60%	34	423
						58%	248	421

HDABW50	984168	191	blastx.2	t-complex polypeptide 1 (AA 1-556) [Homo sapiens]	emb|CAA37064.1|	100%	185	451
HAQBH11	985043.	192	blastx.2	(AJ243177) Xenopus RPA interacting protein alpha [Xenopus laevis]	emb|CAB45690.1|	42% 46% 46% 28% 35%	393 110 238 244 247	626 244 393 369 336
HMVAW42	985280	193	blastx.2	extensin-like protein [Zea mays]	emb|CAA84230.1|	28%	960	10
HAGDF03	985323	194	blastx.2	neuromedin U [Homo sapiens]	emb|CAA53619.1|	100%	169	690
HOPKI29	985401	195	blastx.2	(AF087135) F1FO-type ATPase subunit d [Homo sapiens]	gb|AAC36338.1|	100%	65	547
HAJCA11	985580	196	blastx.2	GTBP-ALT [Homo sapiens]	dbj|BAA23673.1|	98% 97%	394 2	1293 391
HWAHA11	986078	197	blastx.2	(AB031292) proteolipid protein 2 [Mus musculus]	dbj|BAA83500.1|	31%	134	511
HSAMI43	986158	198	blastx.2	(AF111423) chromosome condensation protein XCAP-G [Xenopus laevis]	gb|AAD09819.1|	54% 53%	14 14	1471 1387
HNFJH73	986165	199	blastx.2	erm [Homo sapiens]	emb|CAA65246.1|	100%	1	591
HNTCH03	986328	200	blastx.2	put. ORF [Homo sapiens]	emb|CAA39297.1|	48% 70%	103 651	363 680
HSUAA20	986744	201	blastx.2	replication protein A,	gb|AAA36584.1|	100%	2	1312

				70-kDa subunit [Homo sapiens]		100%	1315	1347
HSPAD08	986767	202	blastx.2	(AL031663) dJ461P17.6 (Major Epididymis-specific protein E4 1 1 sapiens]	emb|CAB37641.1|	100%	905	1054
HFKBA32	987018	203	blastx.2	(AL121740) hypothetical protein [Homo sapiens]	emb|CAB57330.1|	76% 83%	256 540	1092 743
HHFLU49	987071	204	blastx.2	(AF068749) sphingosine kinase [Mus musculus]	gb|AAC61698.1|	46%	278	718
HOENX16	987112	205	blastx.2	helix-loop-helix protein [Homo sapiens]	emb|CAA69255.1|	100%	368	850
HTFOW71	987165	206	blastx.2	(AF121862) sorting nexin 13 [Homo sapiens]	gb|AAD27835.1|AF121862_1	96% 88%	38 3	400 53
HTTAG03	987262	207	blastx.2	SPIN protein [Homo sapiens]	emb|CAA75163.1|	94% 47% 41% 44% 36% 33% 37% 61%	57 81 663 492 801 516 195 1228	1289 476 1238 857 1061 812 428 1278

HNTNN89	987577	208	blastx.2	elongation factor 2 [Homo sapiens]	emb|CAA35829.1|	98% 77% 100%	110 543 2	547 713 115
HRADQ96	987636	209	blastx.2	(AF134726) NG23 [Homo sapiens]	gb|AAD21821.1|	96% 100%	303 6	398 29
HLDCJ16	987808	210	blastx.2	3-oxoacyl-[acyl-carrier-protein] reductase (EC 1.1.1.100). [Escherichia coli]	dbj|BAA35901.1|	39%	159	761
HCOPH23	987900	211	blastx.2	nucleoporin-like protein [Homo sapiens]	emb|CAA61667.1|	94%	289	447
HEEAQ78	988159	212	blastx.2	TBX2 [Homo sapiens]	gb|AAA73861.1|	99% 98% 33% 29% 29%	164 1 12 206 260	475 165 191 394 403
HOFNY16	988363	213	blastx.2	(AL110239) hypothetical protein [Homo sapiens]	emb|CAB53690.1|	99% 100%	242 144	853 236
HSLCX45	988441	214	blastx.2	(AB006572) RPB5 meidating protein [Homo sapiens]	dbj|BAA34781.1|	98%	106	1404
HLMJB09	988499	215	blastx.2	cDNA EST yk575f9.3 comes from this gene [Caenorhabditis elegans]	emb|CAA94859.1|	39% 34%	270 496	491 591
HOVEF60	988526	216	blastx.2	envelope protein [Homo sapiens]	gb|AAA88027.1|	75% 36%	377 11	598 298
HOGDR72	988536	217	blastx.2	RNA polymerase II transcription factor SIII	gb|AAA75522.1|	100%	62	415

HOCMF20	988556	218	blastx.2	high mobility group protein 2a [Homo sapiens]	emb|CAA71143.1|	99%	1	366
HAMHH26	988737	219	blastx.2	MHC Class I region proline rich protein [Homo sapiens]	gb|AAB40147.1|	98%	429	728
HHFOX44	988904	220	blastx.2	binding protein [Homo sapiens]	emb|CAA00862.1|	99% 52% 56% 28% 36% 31% 45%	153 308 804 67 88 637 48	587 907 956 222 318 789 107
HPWDE54	989029	221	blastx.2	(AJ252060) TRABID protein [Homo sapiens]	emb|CAB64449.1|	97%	1	2127
HNOAX46	989183	222	blastx.2	Berg36 [Homo sapiens]	emb|CAA67781.1|	100%	49	789
HCQCB28	989280	223	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	60% 77% 57%	471 301 1148	292 167 1107
HOOJB32	989321	224	blastx.2	(AB007619) EBAG9 [Homo sapiens]	dbj|BAA22572.1|	100%	535	1173
HMWJJ35	989323	225	blastx.2	Leu2 [Homo sapiens]	emb|CAA75516.1|	93% 100% 72%	312 551 260	410 607 346
HHFIA95	989396	226	blastx.2	(AB002533) Qip1 [Homo sapiens]	dbj|BAA19546.1|	92% 24% 47% 35%	120 279 1 5	1178 974 216 121

HSPSH36	989607	227	blastx.2	transcription factor ILF [Homo sapiens]	emb|CAA43200.1|	94% 100%	77 250	247 282
HAAAA25	989952	228	blastx.2	p67 myc protein [Homo sapiens]	dbj|BAA01374.2|	100%	100	660
HTEMJ16	990060	229	blastx.2	(AF151075) HSPC241 [Homo sapiens]	gb|AAF36161.1|AF151075_1	97%	361	618
HWLAB90	990146	230	blastx.2	(AF067817) VAV-3 protein [Homo sapiens]	gb|AAC79695.1|	98% 89%	2 622	652 813
HOSED43	990184	231	blastx.2	(AK001851) unnamed protein product [Homo sapiens]	dbj|BAA91941.1|	100%	2	790
HNODF50	990254	232	blastx.2	(AF222742) synaptic glycoprotein SC2 [Homo sapiens]	gb|AAF32373.1|AF222742_1	100% 93% 100%	616 187 116	1155 528 181
HLWBV17	990255	233	blastx.2	(AF222742) synaptic glycoprotein SC2 [Homo sapiens]	gb|AAF32373.1|AF222742_1	100% 78% 57%	282 123 26	542 206 88
HOCQH66	990435	234	blastx.2	collagen type VI, alpha 3 chain [Homo sapiens]	emb|CAA36267.1|	98% 43% 40% 45% 46% 44% 47% 48% 45% 46% 43% 44% 41%	43 40 40 43 49 43 46 46 46 46 49 49 43	2745 330 330 327 330 327 330 330 330 330 339 327 327

						48%	85	330
						41%	46	327
						41%	49	327
						41%	46	333
						43%	49	327
						26%	391	960
						26%	1117	1587
						42%	531	647
HOGDC67	990546	235	blastx.2	pyrroline-5-carboxylate reductase [Homo sapiens]	gb|AAA36407.1|	99%	75	1031
HCDBO02	990609	236	blastx.2	TIP120 [Rattus norvegicus]	dbj|BAA13432.1|	97%	10	3258
						66%	131	202
HODGN92	990611	237	blastx.2	coded for by C. elegans cDNA yk38h3.5; coded for by C. elegans 1 1 [Caenorhabditis elegans]	gb|AAA83581.1|	37%	107	499
HPDRP30	990751	238	blastx.2	(AL122073) hypothetical protein [Homo sapiens]	emb|CAB59248.1|	99%	1436	2098
HBXFN09	990769	239	blastx.2	ORF 3 [Homo sapiens]	gb|AAA58464.1|	42%	65	226
						71%	43	63
HDTBO75	990913	240	blastx.2	(AF065391) ZIS1 [Homo sapiens]	gb|AAD09746.1|	100%	241	324
						39%	4	72
						45%	13	72
						32%	1	75
						36%	1	72
						33%	13	75
						21%	4	72

HELGN26	991014	241	blastx.2	(AF123653) FEZ1 [Homo sapiens]	gb|AAD23834.1|AF1 23653_1	47% 52% 38%	192 32 171	902 181 470
HODCU15	991048	242	blastx.2	(AF213822) hypothetical protein [Zymomonas mobilis]	gb|AAF23786.1|AF2 13822_1	42% 56% 27%	1104 1552 1747	1550 1710 1929
HOGDI51	991268	243	blastx.2	(AF007872) torsinB [Homo sapiens]	gb|AAC51733.1|	100% 92% 69%	238 607 803	492 873 940
HLWAF02	991516	244	blastx.2	(AK001371) unnamed protein product [Homo sapiens]	dbj|BAA91655.1|	100%	192	449
HRKPA16	991654	245	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	76%	263	24
HPDQX94	991761	246	blastx.2	microsomal glutathione S-transferase 2 [Homo sapiens]	gb|AAC51768.1|	100%	210	650
HEAAY09	992678	247	blastx.2	TSC-22 [Homo sapiens]	dbj|BAA07598.1|	96%	40	333
HPDRH78	992780	248	blastx.2	(AK000474) unnamed protein product [Homo sapiens]	dbj|BAA91189.1|	100% 79%	598 933	903 1079
HODFO57	992973	250	blastx.2	(AF176524) F-box protein FBL10 [Mus musculus]	gb|AAF09133.1|	67%	8	811
HOCPZ44	993380	251	blastx.2	(AF151075) HSPC241 [Homo sapiens]	gb|AAF36161.1|AF1 51075_1	99%	157	540
HPAMU38	993403	252	blastx.2	cDNA EST	emb|CAB04720.1|	48%	111	407

				yk269g12.5 comes from this gene; cDNA EST EMBL:D27364 1 1 comes from this gene; cDNA EST EMBL:D36272 comes fr		30% 37%	450 20	803 91
HNGGK47	993602	253	blastx.2	(AF126163) HHLA3 protein [Homo sapiens]	gb|AAD33288.1|AF126163_1	78%	277	372
HODGN51	993754	254	blastx.2	putative p150 [Homo sapiens]	gb|AAC51261.1|	64% 65% 48% 69%	124 77 3 545	549 205 134 613
HODCT60	993806	255	blastx.2	(AK002129) unnamed protein product [Homo sapiens]	dbj|BAA92096.1|	56% 50%	239 624	382 671
HAQBV81	993918	256	blastx.2	putative [Rattus norvegicus]	emb|CAA52297.1|	43%	3	695
HDTGF49	993931	257	blastx.2	(AK002081) unnamed protein product [Homo sapiens]	dbj|BAA92074.1|	87%	1073	1531
HOGBN62	994134	258	blastx.2	(AF132952) CGI-18 protein [Homo sapiens]	gb|AAD27727.1|AF132952_1	95% 95% 43%	155 12 421	295 155 558
HSKGR42	994234	259	blastx.2	(AK000741) unnamed protein product [Homo sapiens]	dbj|BAA91354.1|	73% 96% 56% 51% 34% 28%	147 1 412 413 291 273	536 153 528 499 404 377

						28% 32%	316 291	468 437
HOEBQ85	994356	260	blastx.2	(AL117435) hypothetical protein [Homo sapiens]	emb|CAB55923.1|	97%	3	362
HOPJG01	994536	261	blastx.2	creatine kinase B [Homo sapiens]	emb|CAA33389.1|	100%	1	1134
HKBAK06	994596	262	blastx.2	Cks1 protein homologue [Homo sapiens]	emb|CAA38702.1|	100% 81%	231 67	410 144
HKGCN61	994664	263	blastx.2	NifU-like protein [Homo sapiens]	gb|AAC50885.1|	100%	169	531
HFOYI37	994776	265	blastx.2	ribosomal protein [Homo sapiens]	dbj|BAA03400.1|	100%	85	513
HOFNL18	994874	266	blastx.2	(AL031432) dJ465N24.1 (PUTATIVE novel protein similar to predicted yeast and worm proteins) [Homo sapiens]	emb|CAB37991.1|	84%	43	339
HOFNT57	994954	267	blastx.2	phosphate cyclase [Homo sapiens]	emb|CAA72364.1|	98% 93%	273 124	1157 270
HCBMT45	994993	268	blastx.2	lin-10 protein homolog [Rattus norvegicus]	gb|AAB51383.1|	96%	46	1311

HATDZ56	995200	269	blastx.2	(AL031668) dJ64K7.2 (eukaryotic translation initiation factor 2, subunit 2 (beta, 38kD)) [Homo sapiens]	emb|CAB43741.1|	100%	156	1154
HOCQI44	995229	270	blastx.2	(AL050348) dJ447F3.2 (ubiquitin-conjugating enzyme E2 H10) [Homo sapiens]	emb|CAB66118.1|	92%	8	520
HNOJG43	995562	271	blastx.2	alpha 4 protein [Homo sapiens]	emb|CAA70119.1|	99%	73	981
HSPSB95	995590	272	blastx.2	proteasome subunit HsN3 [Homo sapiens]	dbj|BAA05647.1|	99%	47	838
HCORG29	995806	273	blastx.2	SRp30c [Homo sapiens]	gb|AAA93069.1|	100%	100	762
HCRNO02	995894	274	blastx.2	N8 GENE PRODUCT LONG ISOFORM, N8L PROTEIN=D52 1 HK4A1].	sp|G1488414|G14884 14	74% 63%	33 2	149 34
HCBOI79	996247	275	blastx.2	(AK000857) unnamed protein product [Homo sapiens]	dbj|BAA91400.1|	80% 100%	99 419	506 637
HVCAB73	996337	276	blastx.2	NF45 protein [Homo sapiens]	gb|AAA20993.1|	94% 70%	90 1175	1307 1297
HSDJH04	996619	277	blastx.2	RNA polymerase II subunit [Homo sapiens]	gb|AAA91459.1|	100%	219	419
HSOAN18	996804	278	blastx.2	(AB030654) AP-4 clathrin adaptor-related complex sigma4 subunit [Homo sapiens]	dbj|BAA82970.1|	100%	1	222

HHEHF49	996874	279	blastx.2	L-lactate permease [Escherichia coli]	gb|AAA03583.1|	91%	770	222
HCHCF36	996903	280	blastx.2	rac protein kinase-beta [Homo sapiens]	gb|AAA36585.1|	96%	1	456
HAHCK58	997127	281	blastx.2	(AK001138) unnamed protein product [Homo sapiens]	dbj|BAA91517.1|	98%	1	228
HETIJ06	997165	282	blastx.2	(AF152097) CGI-05 protein [Homo sapiens]	gb|AAD34147.1|AF152097_1	97%	218	352
HAPOE30	997595	283	blastx.2	nuclear protein SA-1 [Homo sapiens]	emb|CAA99731.1|	100% 88%	244 11	759 244
HRGDC33	997862	284	blastx.2	C13F10.7 gene product [Caenorhabditis elegans]	gb|AAC47967.1|	34% 44%	301 301	735 648
HMTMB91	997873	285	blastx.2	(AC004858) U1 small ribonucleoprotein 1SNRP homolog; match to PID:g4050087 [Homo sapiens]	gb|AAF19255.1|AC004858_3	100% 41%	1037 487	1174 555
HFAAD07	998059	286	blastx.2	(AJ132948) rfg7 protein [Homo sapiens]	emb|CAB55313.1|	97% 97%	274 32	957 298
HE8TG67	998517	287	blastx.2	product is related to clathrin-associated protein. [Homo sapiens]	dbj|BAA09762.1|	97% 97%	1226 502	1360 618
HACNC39	998533	288	blastx.2	weak similarity to Arabidopsis thaliana ubiquitin-like protein 8 [Caenorhabditis elegans]	gb|AAB42266.1|	80%	162	380

HCOQP78	998901	289	blastx.2	(AB008927) neuropsin type2 [Homo sapiens]	dbj|BAA82666.1|	100%	75	989
HCGMA67	998905	290	blastx.2	rab8 [Canis familiaris]	emb|CAB56776.1|	100%	47	664
HSKHK19	998968	291	blastx.2	(AC004890) similar to HUB1; similar to BAA24380 (PID:g2789430) [Homo sapiens]	gb|AAD45825.1|AC004890_2	98% 38% 54% 70%	2 566 1095 558	466 721 1160 587
HAGGR59	999124	292	blastx.2	histone H1-I [Volvox carteri]	gb|AAA74723.1|	36%	270	596
HOPKS83	999148	293	blastx.2	(AF026124) schwannoma-associated protein [Mus musculus]	gb|AAC73069.1|	93%	425	1894
HE8CY70	999157	294	blastx.2	SEP PROTEIN (FRAGMENT).	sp|Q15352|Q15352	100% 92% 66% 48%	691 32 3 635	1368 691 128 706
HPCTI53	999243	295	blastx.2	(AJ250562) tetraspanin protein [Homo sapiens]	emb|CAB65594.1|	88% 100%	34 474	546 779
HOPKN50	999313	296	blastx.2	(AF017790) retinoblastoma-associated protein HEC [Homo sapiens]	gb|AAB80726.1|	95%	152	1702
HAPAI17	999778	297	blastx.2	(AK001832) unnamed protein product [Homo sapiens]	dbj|BAA91931.1|	97%	2	115
HHAUV59	999808	298	blastx.2	p116Rip [Mus musculus]	gb|AAB18198.1|	79% 67% 21%	95 547 1454	1903 801 1669

HTXLL31	1000315	299	blastx.2	(AK001770) unnamed protein product [Homo sapiens]	dbj|BAA91897.1|	36% 27% 26% 39%	663 666 4 481	992 1379 645 621
HDPUH64	1000339	300	blastx.2	CRAG protein [Drosophila melanogaster]	emb|CAA76938.1|	42% 66% 65%	8 525 475	598 692 534
HTTHS93	1000424	301	blastx.2	(AL117183) conserved hypothetical protein [Schizosaccharomyces pombe]	emb|CAB54870.1|	25% 36%	55 755	720 994
HMVCG79	1000582	302	blastx.2	(AJ387747) sialin [Homo sapiens]	emb|CAB62540.1|	100%	3	854
HODHK20	1000669	303	blastx.2	(AF176555) A-kinase anchoring protein 220 [Homo sapiens]	gb|AAF07045.1|AF176555_1	94%	76	627
HCHMO53	1000875	304	blastx.2	(AK000462) unnamed protein product [Homo sapiens]	dbj|BAA91181.1|	41%	296	556
HFKKG84	1001066	305	blastx.2	(AF047002) transcriptional coactivator ALY [Homo sapiens]	gb|AAD09608.1|	98%	1	666
HOFMT20	1001333	306	blastx.2	(AK000541) unnamed protein product [Homo sapiens]	dbj|BAA91241.1|	48%	40	237
HPAMB04	1001695	307	blastx.2	17-kDa protein [Homo sapiens]	gb|AAA36038.1|	99%	127	621
HODEK48	1001901	308	blastx.2	pol [porcine endogenous retrovirus]	emb|CAA76582.1|	41% 33%	398 25	721 423

HVVCB28	1001954	309	blastx.2	S19 ribosomal protein [Homo sapiens]	gb|AAA89070.1|	100%	373	807
HCOOS01	1002071	310	blastx.2	proliferation associated gene (pag) [Homo sapiens]	emb|CAA48137.1|	100%	105	701
HDACA35	1002096	311	blastx.2	(AK001496) unnamed protein product [Homo sapiens]	dbj|BAA91724.1|	73%	23	652
HOVDG59	1002328	312	blastx.2	(AK001610) unnamed protein product [Homo sapiens]	dbj|BAA91787.1|	100% 28%	13 40	639 588
HTJAD78	1002459	313	blastx.2	immunoglobulin gamma-2 heavy chain [Homo sapiens]	emb|CAB58438.1|	98%	64	1041
HCDCF69	1002468	314	blastx.2	lysyl hydroxylase [Homo sapiens]	gb|AAA60116.1|	98%	353	508
HPTTW90	1002479	315	blastx.2	Huntington's Disease (HD) gene [Homo sapiens]	emb|CAA93701.1|	99%	3	356
HSUBG36	1002492	316	blastx.2	snRNP E protein (AA 1-92) [Homo sapiens]	emb|CAA31007.1|	100%	67	342
HODFU72	1002527	317	blastx.2	(AB022660) SET-binding protein (SEB) [Homo sapiens]	dbj|BAA82444.1|	32%	57	689
HCNSF57	1002545	318	blastx.2	immunoglobulin lambda light chain [Homo sapiens]	emb|CAA40940.1|	96%	134	826
HODJU13	1002546	319	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	85%	2	106

HODIL25	1002551	320	blastx.2	nuclear protein, NP220 [Homo sapiens]	dbj|BAA11748.1|	99%	207	1556
HUVHS56	1002563	321	blastx.2	(AF097441) phenylalanine-tRNA synthetase [Homo sapiens]	gb|AAC83802.1|	100%	174	755
HPMJQ18	1002565	322	blastx.2	unnamed protein product [unidentified]	emb|CAB69299.1|	91% 53%	407 209	823 247
HLHCI46	1002591	323	blastx.2	folate-binding protein precursor [Homo sapiens]	gb|AAA35822.1|	100%	153	923
HAOSD18	1002607	324	blastx.2	homologue to elongation factor 1-gamma from A.salina [Homo sapiens]	emb|CAA45089.1|	100%	98	1408
HACNG47	1002610	325	blastx.2	ribosomal protein L37a [Homo sapiens]	gb|AAA60280.1|	100%	86	361
HOPJX95	1002729	326	blastx.2	RPS16 [Homo sapiens]	gb|AAA60583.1|	100%	244	681
HSCLR05	1002807	327	blastx.2	HKR-T1 [Homo sapiens]	gb|AAB24264.2|	58% 42% 51% 41%	3 3 3 591	176 281 215 659
HVVAO74	1002811	328	blastx.2	clathrin light-chain A [Homo sapiens]	gb|AAA59505.1|	100%	178	831
HVVBK18	1003155	330	blastx.2	proteasome subunit HsC7-I [Homo sapiens]	dbj|BAA05646.1|	100%	323	925
HSCLM55	1003224	332	blastx.2	(AC004983) similar to PID:g3877944 [Homo sapiens]	gb|AAD15546.1|	100%	28	768

HETJU23	1003706	333	blastx.2	(AL133630) hypothetical protein [Homo sapiens]	emb|CAB63754.1|	99%	881	1477
						99%	504	881
						73%	64	513
						100%	373	507
						28%	878	1084
						26%	1121	1327
						35%	343	459
HNOKB73	1004480	334	blastx.2	(AF026692) frpHE [Homo sapiens]	gb|AAC04617.1|	93%	18	515
HODFB06	1004583	335	blastx.2	(AB012223) ORF2 [Canis familiaris]	dbj|BAA25253.1|	41%	362	760
						51%	3	143
						63%	135	191
						51%	265	360
						70%	200	259
HODJA76	1004619	336	blastx.2	(AF113685) PRO0974 [Homo sapiens]	gb|AAF29584.1|AF113685_1	56%	171	293
						38%	277	453
HODJY60	1004625	337	blastx.2	putative [Homo sapiens]	gb|AAC37567.1|	100%	141	683
HODEF10	1004627	338	blastx.2	(AB005878) BYJ15 [Nicotiana tabacum]	dbj|BAA21615.1|	69%	10	135
HODFB03	1004631	339	blastx.2	DNA primase (p58 subunit) [Homo sapiens]	emb|CAA52378.1|	90%	1	789
HPMLN08	1004632	340	blastx.2	(AF027728) kinesin-related protein [Xenopus laevis]	gb|AAC60300.1|	25%	518	1165
						26%	135	533
						24%	524	1051
						23%	524	1060
HODEH08	1004633	341	blastx.2	(AK001410) unnamed protein product [Homo sapiens]	dbj|BAA91675.1|	87%	22	369

HEGBF25	1004635	342	blastx.2	(AF069736) PCAF associated factor 65 beta [Homo sapiens]	gb|AAC39906.1|	98%	165	758
HODJB51	1004643	343	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	52%	405	142
HODEC38	1004648	344	blastx.2	(AJ010089) GANP protein [Homo sapiens]	emb|CAB52687.1|	97% 52% 62% 87%	68 1993 2055 2030	208 2175 2150 2053
HODIQ24	1004660	345	blastx.2	(AK001892) unnamed protein product [Homo sapiens]	dbj|BAA91965.1|	100%	3	236
HVVDD56	1004887	346	blastx.2	gpStaf50 [Homo sapiens]	emb|CAA57684.1|	97% 66%	435 1204	1238 1245
HTHDV01	1004950	347	blastx.2	c-fos protein [Homo sapiens]	gb|AAA52471.1|	100%	153	1292
HVVDJ95	1005153	348	blastx.2	Ral guanine nucleotide dissociation stimulator [Homo sapiens]	gb|AAA52360.1|	80%	185	400
HODIY29	1005236	349	blastx.2	DNA-binding protein 5 - human	pir|S26650|S26650	97% 89% 57% 59% 53% 52% 58% 48% 43% 65%	1 13 1 4 19 4 4 4 1 4	963 963 453 453 453 444 408 453 453 276

						41%	1	444
						42%	25	441
HOELP29	1005359	350	blastx.2	uridine kinase [Mus musculus]	gb|AAB50568.1|	71%	309	1013
HWLFG04	1005384	351	blastx.2	tax1-binding protein TXBP151 [Homo sapiens]	gb|AAA75595.2|	100%	2	1015
HYAAC49	1005511	352	blastx.2	(AF001628) interactor protein AblBP4 [Homo sapiens]	gb|AAD00897.1|	97%	107	688
						93%	107	727
						33%	155	688
						88%	58	111
						70%	690	749
						100%	717	737
						100%	720	740
						87%	717	740
HCOOA71	1005843	353	blastx.2	nuclear autoantigen fo 14 kDa [Homo sapiens]	emb|CAB09660.1|	76%	68	205
HOUFB45	1005974	354	blastx.2	(AF072441) calcineurin binding protein cabin 1 [Homo sapiens]	gb|AAD40846.1|AF072441_1	98%	2	403
HUSJI14	1006018	355	blastx.2	(AK001676) unnamed protein product [Homo sapiens]	dbj|BAA91829.1|	99%	411	2081
						98%	40	381
						54%	377	448
HMCDB21	1006055	356	blastx.2	alpha1A-voltage-dependent calcium channel [Homo sapiens]	gb|AAB49678.1|	100%	435	509
HSDEY08	1006142	357	blastx.2	SWI/SNF complex 60 KDa subunit [Homo	gb|AAC50697.1|	92%	573	1037
						80%	136	603

				sapiens]		47%	158	403
						37%	105	377
						27%	666	773
						34%	323	418
HOOJT92	1006215	358	blastx.2	(AC007055) unknown [Homo sapiens]	gb|AAD31938.1|AC0 07055_3	97%	44	172
HNQRE03	1006250	359	blastx.2	(AK000927) unnamed protein product [Homo sapiens]	dbj|BAA91430.1|	100%	4	669
HPCTS21	1006317	360	blastx.2	(AE001373) predicted secreted protein [Plasmodium falciparum]	gb|AAC71813.1|	27%	237	1049
						22%	177	1187
HFATL31	1006399	361	blastx.2	light chain 3 subunit of microtubule-associated proteins 1A and 1B [Rattus norvegicus]	gb|AAA20645.1|	82%	146	505
HE2JE77	1006445	362	blastx.2	(AF078848) BUP [Homo sapiens]	gb|AAD44480.1|	100%	2	328
HCBNX87	1006470	363	blastx.2	(AL137735) hypothetical protein [Homo sapiens]	emb|CAB70899.1|	99%	1	420
HNTDJ68	1006483	364	blastx.2	l(3)mbt protein homolog [Homo sapiens]	gb|AAC69438.1|	64%	3	626
						41%	628	1410
						44%	3	533
						40%	201	611

							60%	631	840
							55%	6	221
							49%	628	840
							28%	459	614
HTRAA05	1006512	365	blastx.2	heat shock protein [Drosophila melanogaster]	emb|CAA30276.1|		33%	109	294
							50%	393	428
HMTAL96	1006635	366	blastx.2	ras-like protein [Homo sapiens]	gb|AAA36547.1|		98%	90	515
HDTJP21	1006858	367	blastx.2	(AF090942) PRO0657 [Homo sapiens]	gb|AAF24054.1|AF0 90942_1		67%	17	136
							73%	126	215
HISEQ81	1006943	368	blastx.2	(AF009668) polyprotein [multiple sclerosis associated retrovirus]	gb|AAB66528.1|		83%	247	17
							70%	435	235
							87%	514	395
HODFH02	1006953	369	blastx.2	(AK002129) unnamed protein product [Homo sapiens]	dbj|BAA92096.1|		74%	346	438
							52%	426	488
HOCPP18	1007230	370	blastx.2	(AF150100) small zinc finger-like protein [Homo sapiens]	gb|AAD40006.1|AF1 50100_1		100%	305	571
HODFP91	1007941	371	blastx.2	SpZ12-1 [Strongylocentrotus purpuratus]	gb|AAA85705.1|		27%	69	806
H6EDU06	1007976	372	blastx.2	(AF151894) CGI-136 protein [Homo sapiens]	gb|AAD34131.1|AF1 51894_1		99%	75	449
HPCRD26	1008013	373	blastx.2	predicted using Genefinder; Similarity to Yeast mitochondrial 1 1 yk432a4.3 comes	emb|CAB02879.1|		35%	423	1229
							44%	1220	1294

				from this gene; cDNA EST yk432a4				
HSIEH63	1008027	374	blastx.2	(AF007791) secreted cement gland protein XAG-2 homolog [Homo sapiens]	gb|AAC77358.1|	65%	87	554
HPASD51	1008071	375	blastx.2	PDI (E.C.5.3.4.1) [Bos taurus]	gb|AAA30690.1|	33%	81	752
HCOQH27	1008154	376	blastx.2	IEF SSP 9502 [Homo sapiens]	gb|AAA65201.1|	100%	131	1315
HCOPZ14	1008179	378	blastx.2	guanylate kinase [Homo sapiens]	gb|AAC37598.1|	84%	889	1023
HODEC78	1008299	379	blastx.2	bicaudal-D [Homo sapiens]	gb|AAB94805.1|	94% 97% 40% 72% 20% 35% 21% 25% 39%	379 1203 319 1351 328 1191 328 856 328	1230 1343 744 1470 1188 1343 792 1056 396
HODEF29	1008304	380	blastx.2	(AB005878) BYJ15 [Nicotiana tabacum]	dbj|BAA21615.1|	80% 22%	38 202	133 330
HODEF78	1008314	382	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	93%	3	101
HODEL83	1008324	383	blastx.2	pol gene protein; Xxx [Homo sapiens]	gb|AAA88026.1|	76%	132	407
HHPSH76	1008325	384	blastx.2	(AF019386) heparan sulfate 3-O-sulfotransferase-1	gb|AAB84388.1|	100%	286	1206

				precursor [Homo sapiens]				
HBGBE52	1008326	385	blastx.2	T2 [Mus musculus]	emb|CAA48048.1|	29% 33%	782 661	408 407
HBQAB30	1008327	386	blastx.2	alternatively spliced [Homo sapiens]	gb|AAA35654.1|	93%	24	737
HLHCB31	1008332	387	blastx.2	matrix metalloproteinase, MT2MMP [Homo sapiens]	dbj|BAA13071.1|	97%	1	558
HPFDV51	1008335	388	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	66% 69%	62 3	217 71
HODEG13	1008337	390	blastx.2	unknown protein [Homo sapiens]	gb|AAA88038.1|	65% 66% 67%	2 183 341	214 341 478
HHPFK16	1008345	391	blastx.2	Krueppel-related DNA-binding protein [Homo sapiens]	gb|AAA52689.1|	79% 65%	166 387	405 470
HARAL81	1008349	392	blastx.2	(AF090894) PRO0113 [Homo sapiens]	gb|AAF24018.1|AF090894_1	55% 55%	217 323	104 216
HFTAU42	1008350	393	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	59% 55% 54%	1282 1115 1113	1106 990 1051
HETDA81	1008358	394	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	88% 42%	3 221	110 262

HODEI92	1008359	395	blastx.2	(AF062006) orphan G protein-coupled receptor HG38 [Homo sapiens]	gb|AAC28019.1|	45%	1	306
HODEG86	1008379	397	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	55% 51%	236 424	400 546
HODFA57	1008396	398	blastx.2	retrovirus-related pol polyprotein pseudogene - human 1	pir|A26718|A26718	36% 58%	102 17	596 67
HODFB31	1008401	399	blastx.2	(AL021768) ATP binding protein-like [Arabidopsis thaliana]	emb|CAA16931.1|	52%	1	261
HTEMP79	1008406	400	blastx.2	(AJ223782) CDC10 [Mus musculus]	emb|CAA11547.1|	95% 51% 94%	374 136 625	628 375 678
HODEI59	1008423	401	blastx.2	(AJ237734) ribophorin II [Homo sapiens]	emb|CAB54801.1|	100% 100% 97% 39% 30%	296 1404 1270 1876 1145	1273 1859 1404 1959 1279
HODEF94	1008429	402	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	100%	2	85
HPFCZ53	1008445	403	blastx.2	(AF176818) transcription factor AP-2 [Silurana tropicalis]	gb|AAD53289.1|AF1 76818_1	79% 93%	296 3	769 296
HWACN71	1008764	404	blastx.2	(AF105261) natural killer cell receptor 2B4 [Homo sapiens]	gb|AAD32538.1|AF1 05261_1	100%	174	1268
HOFMU69	1009017	405	blastx.2	(AF077038) unc-50	gb|AAD27771.1|AF0	97%	375	1151

				related protein homolog [Homo sapiens]	77038_1			
HETBR71	1009343	407	blastx.2	(AL049610) dJ1055C14.1 (transcription elongation factor A (SII)-like 1) [Homo sapiens]	emb|CAB55700.1|	99%	182	658
HE2ES17	1009349	408	blastx.2	CDV-1R protein [Mus musculus]	emb|CAA71519.1|	89%	3	914
HELHM06	1009362	409	blastx.2	pre-mRNA splicing factor [Homo sapiens]	gb|AAA36649.1|	85%	56	349
HE2ES61	1009388	411	blastx.2	(AC005034) gc-rich sequence dna-binding factor [Homo sapiens]	gb|AAC82536.1|	100%	555	427
HE2SO43	1009398	412	blastx.2	protein Htf9C [Mus musculus]	emb|CAA39515.1|	74%	73	390
HLHCI07	1009403	413	blastx.2	(AL031985) dJ228H13.1 (similar to Ribosomal protein L21e) 1	emb|CAB46381.1|	75%	127	8
HTTBR65	1009414	414	blastx.2	E1A-F [Homo sapiens]	dbj|BAA02234.1|	100%	55	231
HPFCV71	1009453	415	blastx.2	(AK002129) unnamed protein product [Homo sapiens]	dbj|BAA92096.1|	60%	449	622
HCABR46	1009479	416	blastx.2	BST-2 [Homo sapiens]	dbj|BAA05679.1|	88%	127	423
HCRCB80	1009482	417	blastx.2	OTK27 [Homo sapiens]	dbj|BAA23363.1|	100%	96	479
HPMLW78	1009833	418	blastx.2	E2A/PRL fusion	gb|AAA36764.1|	99%	1	606

				protein [Homo sapiens]				
HODJX27	1009854	420	blastx.2	(AJ005324) glutamate permease [synthetic construct]	emb|CAA06471.1|	90%	1	123
HODJV85	1009857	421	blastx.2	ribosomal protein [Homo sapiens]	gb|AAA36589.1|	77% 35%	366 505	205 416
HOOJO38	1009918	422	blastx.2	ribosomal protein L14 [Homo sapiens]	dbj|BAA13443.1|	98%	1	603
HAOSI69	1009949	423	blastx.2	bcl-1 [Homo sapiens]	gb|AAA58392.1|	100%	271	1155
HSDIY67	1010157	424	blastx.2	hypoxanthine (guanine) phosphoribosyltransferase [Cricetulus longicaudatus]	emb|CAA42198.1|	69%	60	689
HSDZM65	1010299	425	blastx.2	(AJ010953) putative Ca2+-transporting ATPase [Homo sapiens]	emb|CAA09425.1|	100%	2	337
HPDOC39	1010400	426	blastx.2	(AB009282) cytochrome b5 [Homo sapiens]	dbj|BAA23735.1|	99%	171	608
HE2PS15	1010525	427	blastx.2	(AF054175) mitochondrial proteolipid 68MP homolog [Homo sapiens]	gb|AAC39909.1|	100%	63	236
HTTKH22	1010596	428	blastx.2	weak similarity to	emb|CAA86663.1|	38%	887	1435

				microtubule associated proteins; cDNA EST 1 1 EMBL:D37339 comes from this gene; cDNA EST EMBL:D6742		32%	1442	1561
						27%	692	949
HNOJG33	1010698	429	blastx.2	SAS [Homo sapiens]	gb|AAC39524.1|	98%	590	1207
						68%	1203	1274
						100%	1246	1278
HPDVK48	1011090	430	blastx.2	AZ-1 [Mus musculus]	dbj|BAA19002.1|	82%	236	730
						77%	1100	1630
						82%	735	1100
						70%	1	243
						23%	200	775
						23%	1100	1603
						34%	753	1103
						25%	203	769
						29%	1148	1612
						26%	1160	1612
						27%	284	775
						27%	1091	1600
						31%	747	1091
						19%	302	709
						27%	750	1085
						27%	738	1094
						30%	747	1097
						26%	239	727
						27%	660	1088
						22%	747	1085
						33%	750	1007

						20%	780	1331
						23%	735	1061
						25%	305	691
						22%	750	1106
						27%	413	730
						28%	413	730
						42%	151	249
						32%	747	938
						31%	106	246
						23%	401	673
						25%	533	706
						24%	97	273
HNORJ10	1011186	431	blastx.2	hypoxia-inducible factor 1 alpha [Homo sapiens]	gb|AAC50152.1|	99%	30	1628
						54%	120	152
HPDRG92	1011209	432	blastx.2	2-oxoglutarate dehydrogenase precursor [Homo sapiens]	dbj|BAA01393.1|	82%	7	234
						73%	237	326
						35%	1	60
HOFMQ81	1011303	433	blastx.2	unnamed protein product [Bos taurus]	emb|CAA71771.1|	66%	152	541
						66%	97	141
HOFNF27	1011315	434	blastx.2	coxsackie and adenovirus receptor protein [Homo sapiens]	emb|CAA68868.1|	89%	60	623
HOFND52	1011316	435	blastx.2	interferon alpha /beta receptor [Homo sapiens]	emb|CAA61914.1|	43%	240	533
						44%	59	205
HOFNL96	1011321	436	blastx.2	GM2-activator protein [Homo sapiens]	emb|CAA43408.1|	49%	72	551
						43%	28	123
HOFNF53	1011332	437	blastx.2	(AF039584) decay	gb|AAC77439.1|	46%	62	883

				accelerating factor soluble-form precursor; CD55 [Rattus norvegicus]		41%	1155	1706
						28%	161	784
						32%	880	1101
						75%	99	143
HOFMU61	1011360	438	blastx.2	(AJ009698) embigin protein [Rattus norvegicus]	emb|CAA08796.1|	60%	377	1249
HOFOF35	1011499	439	blastx.2	(AF061738) leucine aminopeptidase [Homo sapiens]	gb|AAD17527.1|	86%	88	582
						88%	602	736
						82%	20	88
						25%	52	450
						90%	576	605
HULFJ37	1011537	440	blastx.2	midkine [Homo sapiens]	dbj|BAA01457.1|	100%	124	552
HOFME75	1011607	441	blastx.2	collagen binding protein 2 [Homo sapiens]	dbj|BAA11829.1|	93%	224	970
HOPKO74	1011608	442	blastx.2	collagen binding protein 2 [Homo sapiens]	dbj|BAA11829.1|	99%	229	1482
HCBBA51	1011755	443	blastx.2	(AF077045) ATP synthase epsilon chain [Homo sapiens]	gb|AAD27778.1|AF077045_1	100%	114	266
HDHEB13	1011773	444	blastx.2	type X collagen [Bos taurus]	emb|CAA37624.1|	42%	202	942
						42%	235	942
						52%	229	534
						49%	229	537
						50%	202	537
						49%	232	549
						47%	235	537

						45%	229	534
						45%	229	549
						49%	235	537
						49%	232	537
						45%	199	534
						48%	211	537
						49%	235	537
						49%	235	534
						47%	226	537
						45%	235	534
						44%	226	534
						42%	202	534
						35%	235	750
						45%	235	537
						34%	235	750
						42%	232	534
						40%	202	549
						48%	283	537
						32%	53	277
						50%	50	130
						31%	47	277
HDTMG36	1011821	445	blastx.2	(AJ271158) DAPIT protein [Rattus norvegicus]	emb|CAB71156.1|	91%	75	248
HVVCJ38	1011830	446	blastx.2	CLC-7 chloride channel protein [Homo sapiens]	emb|CAA91556.1|	100%	20	817
HPAMY22	1011840	447	blastx.2	scleraxis=basic helix-loop-helix transcription factor [mice, embryos,	gb|AAB34266.1|	79%	4	180

				Peptide, 207 aa] [Mus sp.]				
HE9CP86	1011847	448	blastx.2	(AF161499) HSPC150 [Homo sapiens]	gb|AAF29114.1|AF161499_1	100%	137	727
HPDOU46	1011883	449	blastx.2	(AF117582) calcyphosine-like protein [Manduca sexta]	gb|AAF16704.1|AF117582_1	52%	72	692
HFCDW73	1011901	450	blastx.2	(AK000376) unnamed protein product [Homo sapiens]	dbj|BAA91124.1|	94%	6	425
HOVEB13	1011919	451	blastx.2	(AL117452) hypothetical protein [Homo sapiens]	emb|CAB55934.1|	99%	96	905
HPAMS93	1011948	452	blastx.2	TB1 [Homo sapiens]	gb|AAA03587.1|	97%	125	1105
HCRBN71	1011966	453	blastx.2	unknown [Saccharomyces cerevisiae]	gb|AAA79999.1|	40%	64	420
HCRNC60	1012005	454	blastx.2	tropomyosin [Homo sapiens]	gb|AAA36771.1|	81% 91% 31% 28% 27% 24% 22%	769 1202 796 766 766 925 1238	1236 1519 1245 1257 1218 1212 1459
HSPSJ24	1012064	455	blastx.2	IFN-alpha responsive transcription factor [Homo sapiens]	gb|AAA58687.1|	100%	392	925
HOVDZ22	1012136	457	blastx.2	unnamed protein product [unidentified]	emb|CAB69195.1|	89%	2	82

HCONM62	1012454	460	blastx.2	100 kDa coactivator [Homo sapiens]	gb|AAA80488.1|	97% 29%	5 2	1306 646
HOGEU69	1012459	461	blastx.2	TB2 [Homo sapiens]	gb|AAA66351.1|	99%	101	691
HVVBD93	1012469	462	blastx.2	(AK001339) unnamed protein product [Homo sapiens]	dbj|BAA91635.1|	33% 27%	23 601	382 852
HCOMV86	1012482	463	blastx.2	DC classII histocompatibility antigen alpha-chain [Homo sapiens]	emb|CAA25141.1|	94% 98%	307 71	834 319
HCONJ23	1012519	464	blastx.2	DNA-PK [Homo sapiens]	gb|AAA79184.1|	97%	1	990
HVVBL04	1012536	465	blastx.2	inositol 1,4,5-trisphosphate receptor type 2 [Mus musculus]	emb|CAA94861.1|	98%	2	310
HVVAF65	1012542	466	blastx.2	peroxisomal acyl-CoA oxidase [Homo sapiens]	emb|CAA50574.1|	98%	3	731
HCONN76	1012545	467	blastx.2	p78 protein [Homo sapiens]	gb|AAA36458.1|	99%	64	1716
HODEG95	1012599	469	blastx.2	(AF118082) PRO1902 [Homo sapiens]	gb|AAF22026.1|AF118094_21	64% 41%	452 550	300 443

HCOOX52	1012600	470	blastx.2	C1 inhibitor [Homo sapiens]	emb|CAA30314.1|	100%	68	1567
HVVBK78	1012645	472	blastx.2	protein kinase C mu [Homo sapiens]	emb|CAA53384.1|	98%	101	643
HVVBK73	1012646	473	blastx.2	amiloride binding protein [Homo sapiens]	emb|CAA55046.1|	93% 52%	2 648	709 710
HCOMW35	1012652	474	blastx.2	NBK [Homo sapiens]	emb|CAA62013.1|	100%	48	527
HVVBJ28	1012654	475	blastx.2	(AF026851) cytochrome oxidase assembly factor [Homo sapiens]	gb|AAD08640.1|	99% 99%	44 1102	1099 1701
HVVAF41	1012665	477	blastx.2	(AB006202) cytochrome b small subunit of complex II [Homo sapiens]	dbj|BAA22054.1|	100%	74	550
HVVAS32	1012668	478	blastx.2	giantin [Homo sapiens]	emb|CAA53052.1|	95% 97% 27% 22% 23% 23% 22% 23% 23% 22% 20% 22% 19%	24 2032 141 123 222 135 117 153 117 126 117 69 126	2036 2856 1877 2252 2015 2078 2030 2021 1829 2018 1877 2039 1883

							22%	441	1994
							20%	1281	2039
							23%	2014	2622
							84%	43	117
							34%	2437	2700
							22%	2071	2631
							20%	2125	2628
							24%	2143	2625
							23%	2128	2616
							23%	1987	2652
							21%	2032	2538
							24%	2140	2625
							20%	2206	2634
							23%	2035	2622
							21%	2053	2694
							24%	1987	2559
							20%	2104	2715
							25%	2032	2313
							19%	2065	2610
							19%	2152	2628
							20%	2032	2565
							28%	2080	2238
							100%	110	136
							22%	3779	3910
							43%	3833	3901
							21%	2035	2616
							27%	2905	3057
HVVAQ70	1012678	479	blastx.2	voltage dependent anion channel form 3 [Homo sapiens]	gb|AAB93872.1|		100%	134	982

HVVAQ22	1012684	480	blastx.2	smooth muscle myosin light chain kinase, smMLCK [C-terminal] 1 1	gb|AAB50715.1|	98% 98%	67 67	573 573
HTAES83	1012693	481	blastx.2	specific 116-kDa vacuolar proton pump subunit [Homo sapiens]	gb|AAA97878.1|	99% 99%	302 2350	1990 2961
HOCMN67	1012700	482	blastx.2	receptor kinase [Homo sapiens]	gb|AAA58391.1|	99% 92% 54% 60%	1 1142 1310 1332	1155 1306 1375 1376
HAPOW35	1012711	483	blastx.2	agpet8 protein. [Schizosaccharomyces pombe]	emb|CAA94699.1|	48%	113	553
HOVJM48	1013085	484	blastx.2	(AL035593) dJ310J6.1 (novel protein) [Homo sapiens]	emb|CAB56526.1|	100%	2	454
HBJHY84	1013213	485	blastx.2	(AK000703) unnamed protein product [Homo sapiens]	dbj|BAA91330.1|	97%	3	653
HFIAS44	1013288	487	blastx.2	(AF124727) acinusS [Homo sapiens]	gb|AAD56725.1|	99% 100% 43% 38% 34% 28% 24% 26% 23% 30%	205 69 1186 1186 1168 1195 1183 1375 1313 1490	1605 203 1389 1407 1395 1605 1605 1653 1615 1675

						40%	1112	1207
HHAUD68	1013349	488	blastx.2	non-histone chromosomal protein [Homo sapiens]	gb|AAB53427.1|	100%	269	538
HEEAA89	1013436	489	blastx.2	(AF071172) HERC2 [Homo sapiens]	gb|AAD08657.1|	98% 100%	43 2	675 46
HNTAK22	1013524	490	blastx.2	(AF053944) aortic carboxypeptidase-like protein ACLP [Homo sapiens]	gb|AAC25585.1|	99% 34% 32% 27% 27% 25%	2 2 53 20 3 9	3175 853 853 763 305 341
HOVBX78	1013687	491	blastx.2	(AK001751) unnamed protein product [Homo sapiens]	dbj|BAA91882.1|	98% 88% 47%	281 633 649	637 707 750
HVVAW74	1013740	492	blastx.2	elongation factor 2 [Homo sapiens]	emb|CAA35829.1|	99% 90%	139 5	516 136
HSPSF84	1013853	493	blastx.2	heat shock protein [Drosophila melanogaster]	emb|CAA30276.1|	40%	165	440
HPAMV95	1014003	494	blastx.2	metalloproteinase inhibitor precursor [Homo sapiens]	gb|AAA59581.1|	100%	54	713
HOVBX22	1014041	495	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	60% 40% 63%	317 159 181	183 67 149
HPDRB63	1014204	496	blastx.2	zinc finger protein C2H2-25 [Homo sapiens]	gb|AAA93261.1|	60% 65% 59% 53%	2 2 2 2	781 646 679 766

						49%	47	766
						46%	50	775
						68%	2	313
						66%	2	232
HNHGJ66	1014252	497	blastx.2	fused-ccdB [Escherichia coli]	emb|CAA71575.1|	98%	2291	2467
HDPPN96	1014432	498	blastx.2	interferon-gamma induced protein [Homo sapiens]	gb|AAA58683.1|	99%	416	1741
						85%	1535	2434
						39%	1574	2413
						33%	536	1624
HPCTH41	1014485	499	blastx.2	(AB014888) MRJ [Homo sapiens]	dbj|BAA32209.1|	100%	168	890
						92%	1	123
HPCTY73	1014646	500	blastx.2	glycyl tRNA synthetase [Homo sapiens]	dbj|BAA06338.1|	100%	83	2299
HCOPQ33	1014730	501	blastx.2	SOX9 [Homo sapiens]	emb|CAA86598.1|	100%	3	380
HOEBR36	1014754	502	blastx.2	(AF180801) peroxisomal long chain acyl-CoA thioesterase Ib [Mus musculus]	gb|AAF13872.1|	73%	429	1061
						77%	176	352
						73%	9	167
						44%	352	480
HOEER36	1014869	504	blastx.2	(AF172066) retinoic acid repressible protein [Homo sapiens]	gb|AAD49745.1|AF172066_1	100%	75	794
HE8OX75	1015010	505	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	53%	328	158
						54%	246	112
						85%	110	48
HVASI06	1015024	506	blastx.2	(AK000178) unnamed protein product [Homo sapiens]	dbj|BAA90992.1|	100%	106	1086
						31%	619	1206
						96%	35	109
						100%	1083	1106

HDPXP07	1015059	507	blastx.2	(AK000370) unnamed protein product [Homo sapiens]	dbj|BAA91118.1|	64%	3	215
HE2KH02	1015093	508	blastx.2	(AL137756) hypothetical protein [Homo sapiens]	emb|CAB70908.1|	99%	1	615
HSPSI60	1015133	509	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	67%	5	319
HOCOC26	1015143	510	blastx.2	(AE001691) conserved hypothetical protein [Thermotoga maritima]	gb|AAD35130.1|AE001691_4	40% 41%	136 136	690 543
HHEDC05	1015204	511	blastx.2	Lipoprotein RlpA precursor. [Escherichia coli]	dbj|BAA35276.1|	98%	867	61
HODES86	1015304	512	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	57%	125	364
HOPJU57	1015324	513	blastx.2	SELENOPROTEIN W.	sp|O15532|SELW_HUMAN	98%	934	1164
HVCAC71	1015343	514	blastx.2	alcohol dehydrogenase class III [Homo sapiens]	gb|AAA51597.1|	99%	41	1204
HSXCO55	1015360	515	blastx.2	coronin-like protein [Schizosaccharomyces pombe]	emb|CAB11184.1|	33% 28% 30% 24% 30%	159 1258 2063 991 1533	971 1575 2428 1263 1736
HLWDB78	1015430	516	blastx.2	(AK001322) unnamed protein product [Homo	dbj|BAA91623.1|	95% 56%	30 613	602 681

HPCQU04	1015563	517	blastx.2	(AF093414) estrogen response element binding protein [Saguinus oedipus]	gb|AAC77437.1|	98%	315	1232
						73%	1232	1390
						77%	1309	1362
						30%	282	518
HDPAT52	1015574	518	blastx.2	(AF056191) TPA inducible protein [Homo sapiens]	gb|AAC12944.1|	99%	122	1054
						42%	290	1054
						45%	467	1018
						38%	458	1030
						37%	467	1030
						37%	473	1024
						36%	473	1024
						34%	467	1024
HAOSL81	1015620	519	blastx.2	P24 protein [Mus musculus]	dbj|BAA18947.1|	41%	139	549
						32%	815	970
HMWIU46	1015814	520	blastx.2	(AF148457) heterogeneous nuclear ribonucleoprotein, alternate transcript [Homo sapiens]	gb|AAF04487.1|AF148457_1	99%	232	1152
HSXCQ19	1015994	521	blastx.2	(AC006486) BC85722_1 [Homo sapiens]	gb|AAD11988.1|	90%	3	1175
						37%	880	1203
						25%	30	515
						29%	595	867
						30%	15	299
						28%	63	284
						25%	523	888
						47%	341	397
HNOAG06	1016272	522	blastx.2	(AF001947) U4/U6-associated RNA	gb|AAC09069.1|	100%	340	546

HE2KN09	1016351	523	blastx.2	(AF095446) syndesmos [Gallus gallus]	gb|AAF29566.1|AF095446_1	75%	24	680
HISDH58	1016740	524	blastx.2	(AF060570) rig-1 protein [Mus musculus]	gb|AAD11628.1|	70% 65% 48%	69 55 1058	1313 210 1222
HSPSB62	1016768	525	blastx.2	(AB016533) nuclear protein containing a WW domain (Npw38) [Homo sapiens]	dbj|BAA76400.1|	100%	196	990
HE2FR37	1016939	526	blastx.2	(AF213393) ATP-binding cassette protein [Mus musculus]	gb|AAF31432.1|	73%	247	726
HBJHU33	1017051	527	blastx.2	(AK001775) unnamed protein product [Homo sapiens]	dbj|BAA91901.1|	99%	82	618
HCOQZ88	1017227	528	blastx.2	(AF027299) protein 4.1-G [Homo sapiens]	gb|AAC16923.1|	100% 47%	225 3	1196 722
HNTSV21	1017374	529	blastx.2	seryl-tRNA synthetase [Homo sapiens]	emb|CAA62635.1|	95% 90%	712 3	1008 32
HNORH33	1017461	530	blastx.2	(AJ132637) ATP-dependent metalloprotease YME1L [Homo sapiens]	emb|CAB51858.1|	99%	255	2063
HUFEF35	1017565	531	blastx.2	precursor polypeptide (AA -21 to 782) [Homo sapiens]	emb|CAA33261.1|	99% 100% 35%	303 2527 1083	2123 3048 1166

HJPCG39	1017694	532	blastx.2	(AF118078) PRO1848 [Homo sapiens]	gb|AAF22022.1|AF1 18094_17	65% 45%	17 142	139 240
HISBM03	1017772	533	blastx.2	(AF092576) translation initiation factor eIF3 p40 subunit; 1	gb|AAC84044.1|	100%	751	924
HOFAA79	1017801	534	blastx.2	(AF134404) delta-6 fatty acid desaturase [Homo sapiens]	gb|AAD31282.1|AF1 34404_1	88% 83%	14 505	532 885
HPRAJ96	1017825	535	blastx.2	growth-regulating protein [Homo sapiens]	gb|AAA18898.1|	100% 100%	690 653	824 685
HBXFX71	1018032	536	blastx.2	(AF071081) proline-rich mucin homolog [Mycobacterium tuberculosis]	gb|AAD41594.1|AF0 71081_1	32% 30%	1 1	597 633
HMVDD81	1018080	537	blastx.2	(AF161477) HSPC128 [Homo sapiens]	gb|AAF29092.1|AF1 61477_1	99%	23	745
HVVDH50	1018226	538	blastx.2	zyxin [Homo sapiens]	emb|CAA64447.1|	100% 100% 32% 21% 32% 45% 24%	143 1330 1303 662 134 1822 5	1327 1857 1455 1336 346 1914 295
HNNBT57	1018243	539	blastx.2	(AK000372) unnamed protein product [Homo sapiens]	dbj|BAA91120.1|	54% 28% 30%	194 355 363	45 230 244
HCONJ11	1018459	540	blastx.2	(AF083385) 30kDa splicing factor; SPF 30 [Homo sapiens]	gb|AAC64086.1|	100%	186	899
HCQAW6	1018501	541	blastx.2	(AK000010) unnamed	dbj|BAA90881.1|	100%	104	436

8				protein product [Homo sapiens]				
HVVCY25	1018772	542	blastx.2	almost identical to nRNP M protein, acc.L03532 [Homo sapiens]	emb|CAA50897.1|	100%	1198	1293
						96%	1381	1455
						98%	409	1059
						56%	418	792
						47%	394	711
						48%	418	810
HCOMB65	1018802	543	blastx.2	dJ68O2.2 (myosin, heavy polypeptide 9, non-muscle) [Homo sapiens]	emb|CAB05105.1|	99%	332	1204
						100%	1803	2600
						100%	1204	1800
						26%	1725	2486
						63%	19	246
						23%	332	1237
						23%	335	1243
						25%	341	1183
						23%	332	1156
						23%	1803	2588
						22%	332	1147
						22%	332	1195
						25%	332	1195
						23%	332	1201
						23%	299	1249
						22%	1734	2531
						23%	1204	1746
						27%	1207	1791
						21%	1219	1767
						22%	335	1198
						30%	1258	1788
						22%	1794	2588
						23%	491	1204
						19%	335	1237

1824	1291	23%				
1815	1285	25%				
470	138	40%				
1198	332	22%				
919	290	23%				
1800	1192	23%				
1246	338	22%				
1773	1219	18%				
1210	353	22%				
1791	1204	25%				
1788	1219	25%				
2435	1809	22%				
1249	320	23%				
2477	1806	23%				
1791	1204	26%				
2471	1806	23%				
2489	1809	18%				
1785	1207	21%				
1237	332	18%				
1794	1207	19%				
2486	1881	27%				
2480	1833	22%				
1800	1207	22%				
1872	1219	23%				
1788	1195	20%				
1776	1219	23%				
1785	1339	23%				
1800	1222	26%				
2462	1806	26%				
1800	1210	23%				

						22%	1204		1788
						23%	1237		1803
						18%	1189		1767
						25%	611		1183
						25%	1228		1473
						29%	1222		1440
						31%	1714		1800
						35%	67		228
						27%	1684		1803
						31%	115		237
						28%	61		216
						26%	67		225
						24%	258		401
						19%	34		234
						28%	249		344
						26%	1192		1305
HVVCF30	1018907	544	blastx.2	(AF010144) neuronal thread protein AD7c-NTP [Homo sapiens]	gb|AAC08737.1|	53%	121		387
						61%	118		294
						69%	149		295
						62%	3		131
						59%	284		349
						53%	42		128
						47%	282		380
HODBV21	1018943	545	blastx.2	(AC004537) similar to tumor suppressor p33ING1; similar to AF044076 (PID:g2829208) [Homo sapiens]	gb|AAC12956.1|	99%	151		861
HCHMD81	1019326	546	blastx.2	(AL023859) trna-	emb|CAA19575.1|	42%	733		945

				splicing endonuclease subunit [Schizosaccharomyces pombe]		29%	85	423
HAZAR95	1019338	547	blastx.2	phosphate carrier protein [Homo sapiens]	emb|CAA42641.1|	100%	110	1192
HMWFS51	1019409	548	blastx.2	(AB012223) ORF2 [Canis familiaris]	dbj|BAA25253.1|	41% 54% 42%	314 71 648	607 277 704
HE8SD82	1019585	549	blastx.2	(AL035494) dJ635G19.2.1 (novel protein (isoform 1)) [Homo sapiens]	emb|CAB44749.1|	99%	13	570
HSPSN08	1019608	550	blastx.2	(AF161491) HSPC142 [Homo sapiens]	gb|AAF29106.1|AF161491_1	100% 99%	134 918	919 1235
HVCAH24	1019749	551	blastx.2	(AC002394) Unknown gene product [Homo sapiens]	gb|AAC05810.1|	100%	103	468
HJPCF71	1019892	554	blastx.2	(AK000566) unnamed protein product [Homo sapiens]	dbj|BAA91259.1|	98%	234	830
HVCAE76	1019942	555	blastx.2	zinc finger protein [Rattus norvegicus]	emb|CAA42610.1|	48% 34% 50% 63%	576 72 1 89	2075 731 90 121
HOCMH14	1020007	556	blastx.2	(AL137618) hypothetical protein [Homo sapiens]	emb|CAB70844.1|	99% 78% 42%	298 1146 1871	1311 1730 1984
HPDRZ03	1020130	557	blastx.2	CCAAT-box DNA binding protein subunit	gb|AAA59930.1|	100%	131	751

				NF-YB [Homo sapiens]				
HOCPO73	1020180	558	blastx.2	protein p84 [Homo sapiens]	gb|AAA53571.1|	93% 97% 100% 42% 37%	3646 3881 3993 1832 1888	2024 3636 3940 1758 1841
HNKDT10	1020832	559	blastx.2	(AF191018) E2IG3 [Homo sapiens]	gb|AAF09482.1|AF191018_1	99% 93%	77 426	436 569
HWHGO25	1020841	560	blastx.2	(AF090942) PRO0657 [Homo sapiens]	gb|AAF24054.1|AF090942_1	68%	3	137
HWMNE31	1020852	561	blastx.2	(AF083384) 45kDa splicing factor; SPF 45 [Homo sapiens]	gb|AAC64085.1|	98%	169	675
HUSYJ75	1020878	562	blastx.2	(AJ242540) hydroxyproline-rich glycoprotein DZ-HRGP [Volvox carteri f. nagariensis]	emb|CAB62280.1|	33% 35% 34% 32% 34% 32% 31% 32% 29% 31% 30% 28% 34% 31%	67 67 67 67 67 67 67 67 64 67 64 64 184 184	684 624 624 684 624 714 696 624 714 654 654 696 624 783
HSDFS07	1020904	563	blastx.2	(AL033534) hypothetical serine-rich secreted protein	emb|CAA22127.1|	27%	981	118

				[Schizosaccharomyces pombe]				
HCOPC09	1021208	564	blastx.2	(AJ245905) HSBP1-like protein [Chlorocebus aethiops]	emb|CAB55759.1|	95%	183	305
HVVBT22	1021323	565	blastx.2	hnRNP G protein [Homo sapiens]	emb|CAA80599.1|	100%	936	1649
HAMFW66	1021327	566	blastx.2	(AF075704) neuronal glutamine transporter [Rattus 1	gb|AAF34240.1|AF075704_1	89% 89% 100%	20 949 15	937 1227 53
HPMBW86	1021661	567	blastx.2	(AF129756) G4 [Homo sapiens]	gb|AAD18083.1|AAD18083	85%	3	614
HOFMK02	1021666	568	blastx.2	(AF038616) small tumor anitgen t-ag [Simian virus 40]	gb|AAC59341.1|	100%	159	230
HOUHK71	1021682	569	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	75%	429	268
HCOOW23	1021759	570	blastx.2	(AJ011376) hypothetical protein [Homo sapiens]	emb|CAB66159.1|	30%	210	689
HACMT02	1021794	571	blastx.2	ORF_o109 [Escherichia coli]	gb|AAA79814.1|	100%	209	3
HISDS67	1022018	572	blastx.2	(AK000633) unnamed protein product [Homo sapiens]	dbj|BAA91298.1|	60% 36% 43% 28% 24% 30% 38%	22 1139 1130 890 417 1277 1344	339 1318 1225 1327 950 1522 1484

						27% 48% 28% 41%	1232 590 1285 1143	1372 682 1455 1193
HOVAA59	1022037	573	blastx.2	(AC002291) Similar ATP-dependent RNA Helicase [Arabidopsis thaliana]	gb|AAC00620.1|	59% 33% 31% 39% 21% 46% 29% 27% 38% 36%	252 1765 1316 1573 1744 1417 1744 1736 1447 1718	1319 2421 1585 1770 2211 1506 1917 1966 1536 1813
HOCPL72	1022059	574	blastx.2	(AK001197) unnamed protein product [Homo sapiens]	dbj|BAA91548.1|	97% 92%	38 2402	1063 2440
HCOMM05	1022082	575	blastx.2	epidermal growth factor receptor kinase substrate [Homo sapiens]	gb|AAA62280.1|	46% 43% 23%	445 115 43	840 435 222
HLYDC86	1022162	576	blastx.2	(AF015040) NUMB protein [Homo sapiens]	gb|AAD01548.1|	100% 100%	3 839	836 1570
HTLEP21	1022167	577	blastx.2	(AF081280) nucleoplasmin-3 [Homo sapiens]	gb|AAC31609.1|	97% 100%	101 33	445 95
HVCAS77	1022313	578	blastx.2	ribonuclease HI large subunit [Homo sapiens]	emb|CAB09725.1|	99%	176	1072
HSKJP93	1022663	580	blastx.2	(AL050022) hypothetical protein	emb|CAB43242.1|	100%	2	247

HAZAA64	1022719	581	blastx.2	[Homo sapiens] predicted using Genefinder; Similarity to Prototheca 1 1 gene; cDNA EST yk386c1.3 comes from this gene; cDNA EST yk38	emb|CAA99938.1|	43%	304	705
HSEBD72	1022904	582	blastx.2	(AF044773) breakpoint cluster region protein 1 [Homo sapiens]	gb|AAC08964.1|	89%	164	580
HDPYE27	1022911	583	blastx.2	(AF062346) zinc finger protein 216 splice variant 1 [Homo sapiens]	gb|AAC42601.1|	100%	428	1066
HCRQL51	1022997	584	blastx.2	PEG1/MEST [Homo sapiens]	emb|CAA72297.1|	100%	50	1030
HDTCC55	1023046	585	blastx.2	(AL117483) hypothetical protein [Homo sapiens]	emb|CAB55956.1|	33% 35% 42%	306 4 105	533 105 182
HOOJQ91	1023049	586	blastx.2	envelope protein [Homo sapiens]	gb|AAA88027.1|	63%	3	530
HCE4K28	1023227	587	blastx.2	(AF021792) Bcl-X/Bcl-2 binding protein [Homo sapiens]	gb|AAB72092.1|	98%	262	750
HPDVY62	1023264	588	blastx.2	DOCK180 protein [Homo sapiens]	dbj|BAA09454.1|	99%	2	1126
HLHDK42	1023339	589	blastx.2	modifier 2 [Mus musculus]	emb|CAA40012.1|	61% 85%	58 3	300 62
HLDRQ55	1023375	590	blastx.2	coiled-coil like protein	gb|AAB61902.1|	98%	5	388

				1 [Mus musculus]				
HVVBI06	1023414	591	blastx.2	(AF064603) GA17 protein [Homo sapiens]	gb|AAC17108.1|	97% 96%	93 1359	647 637
HOCME51	1023422	592	blastx.2	(AK001103) unnamed protein product [Homo sapiens]	dbj|BAA91503.1|	98% 96% 97%	14 319 498	313 492 623
HPDOP74	1023531	593	blastx.2	(AF104670) cell cycle protein [Homo sapiens]	gb|AAD05561.1|	100%	173	1354
HMSOH12	1023545	594	blastx.2	chaperonin-like protein [Homo sapiens]	gb|AAA61061.1|	100%	1	1077
HOPJG50	1023584	595	blastx.2	ribosomal protein L34 [Homo sapiens]	gb|AAC41916.1|	97%	157	507
HDUAB04	1023585	596	blastx.2	ribosomal protein L34 [Homo sapiens]	gb|AAC41916.1|	97%	21	371
HVCAA38	1023632	597	blastx.2	TREB protein [Homo sapiens]	emb|CAA39149.1|	100%	36	818
HIBCN87	1023837	598	blastx.2	(AF006264) recombination and sister chromatid cohesion protein homolog [Homo sapiens]	gb|AAD01193.1|	96% 92% 79% 100% 67% 28% 33% 40% 38% 36% 35%	1 1160 1332 1582 969 88 202 250 1169 331 969	1017 1300 1478 1665 1070 972 471 417 1315 510 1028
HPCOM04	1024000	599	blastx.2	vacuolar H+ ATPase E subunit [Homo sapiens]	emb|CAA53814.1|	100%	141	818

HPAME01	1024332	601	blastx.2	(AL109978) hypothetical protein [Homo sapiens]	emb|CAB53376.1|	98%	804	1061
HTTJS76	1024472	602	blastx.2	N-WASP [Homo sapiens]	dbj|BAA20128.1|	97% 68%	3 6	392 44
HCORI57	1024556	603	blastx.2	39 kDa encoded by N33 [Homo sapiens]	gb|AAB18374.1|	97% 57%	200 198	1231 275
HNORG50	1024624	604	blastx.2	(AF006084) p41-Arc [Homo sapiens]	gb|AAB64189.1|	98% 66%	62 1029	1027 1112
HWLVR07	1024915	605	blastx.2	(AL050273) hypothetical protein [Homo sapiens]	emb|CAB43374.1|	100%	203	517
HOPKF60	1025047	606	blastx.2	(AJ249366) epsilon-COP protein [Homo sapiens]	emb|CAB55628.1|	100%	48	971
HBDAD74	1025102	607	blastx.2	(AL031640) /prediction=(method:"" genscan"", version:""1.0"", 1 1 1 target:SPTREMBL::O6087	emb|CAA21052.1|	39%	2	403
HPCTY12	1025231	608	blastx.2	(AB015597) hTIM1 [Homo sapiens]	dbj|BAA36499.1|	96%	68	1225
HFASF12	1025327	609	blastx.2	(AK000385) unnamed protein product [Homo sapiens]	dbj|BAA91131.1|	64%	251	3
HLIBM71	1025359	610	blastx.2	(AF110776) adrenal gland protein AD-003 [Homo sapiens]	gb|AAF14859.1|AF110776_1	98% 100%	183 512	512 766

HNOKW27	1025366	611	blastx.2	F35C11.4 [Caenorhabditis elegans]	emb|CAA90244.1|	30% 31%	162 743	632 1060
HPFDG48	1025526	612	blastx.2	(AF083242) HSPC024-iso [Homo sapiens]	gb|AAD39840.1|	88% 90%	313 564	387 623
HVVBF24	1025712	613	blastx.2	TRAM protein [Homo sapiens]	emb|CAA45218.1|	100%	175	1296
HE8UF88	1025745	614	blastx.2	retinoblastoma-binding protein mRbAp48 [Mus musculus]	gb|AAC52275.1|	96% 40%	124 1391	1473 1495
HOUBC29	1025749	615	blastx.2	GTP-binding protein (rab2) [Canis familiaris]	gb|AAA30888.1|	100%	444	719
HOCPY47	1025965	616	blastx.2	(AF055010) unknown [Homo sapiens]	gb|AAC09360.1|	99% 92%	1567 1337	2760 1594
HOVKE20	1025990	617	blastx.2	follistatin-related protein FLRG [Homo sapiens]	gb|AAC64321.1|	100%	36	824
HODBK27	1026372	619	blastx.2	(AF054284) spliceosomal protein SAP 155 [Homo sapiens]	gb|AAC97189.1|	100%	123	497
HE8CH59	1026805	620	blastx.2	(AK001093) unnamed protein product [Homo sapiens]	dbj|BAA91500.1|	100% 100% 31% 36%	1913 1654 1994 2405	2632 1848 2689 2755
HSKGR52	1026911	621	blastx	putative glycosyl transferase [Schizosaccharomyces pombe]	emb|CAB10854.1|	55% 76% 42% 40%	488 389 272 92	616 439 376 202

HMUAQ05	1026913	622	blastx.2	(AF151825) CGI-67 protein [Homo sapiens]	gb|AAD34062.1|AF151825_1	74%	54	524
HCOMA45	1026979	623	blastx.2	(AF113685) PRO0974 [Homo sapiens]	gb|AAF29584.1|AF113685_1	51% 66%	557 601	378 566
HE2KI45	1027007	624	blastx.2	(AF161553) HSPC068 [Homo sapiens]	gb|AAF29040.1|AF161553_1	99%	6	1565
HODDO66	1027207	625	blastx.2	S-adenosylmethionine synthetase [Homo sapiens]	emb|CAA48726.1|	78% 94% 52%	35 865 7	241 975 63
HVVAT45	1027269	626	blastx.2	(AF102265) N-acetylglucosamine-phosphate mutase [Homo sapiens]	gb|AAC72409.1|	100% 100%	275 74	1117 277
HVCAG18	1027484	627	blastx.2	(AL031663) dJ461P17.6 (Major Epididymis-specific protein E4 1 1 sapiens]	emb|CAB37641.1|	100%	22	393
HPTXK72	1027486	628	blastx.2	(AL031663) dJ461P17.6 (Major Epididymis-specific protein E4 1 1 sapiens]	emb|CAB37641.1|	100%	91	462
HDTLR06	1029191	630	blastx.2	(AF132552) BcDNA.GM01838 [Drosophila melanogaster]	gb|AAD27851.1|AF132552_1	73%	123	1004
HPAMG11	1029484	631	blastx.2	BB1=malignant cell expression-enhanced gene/tumor 1 line, Peptide, 342 aa] [Homo sapiens]	gb|AAB37433.1|	99%	2	667

HSDJR27	1030870	632	blastx.2	(AL137520) hypothetical protein [Homo sapiens]	emb|CAB70786.1|	100%	52	1176
HOCPL33	1030871	633	blastx.2	extensin [Volvox carteri]	emb|CAA46283.1|	32% 35% 33% 32% 45% 34% 48% 36%	1097 1037 1040 1094 1747 1735 566 74	1516 1429 1420 1429 1899 1881 640 130
HPCQN80	1030963	634	blastx.2	ha1025 is new [Homo sapiens]	dbj|BAA07552.1|	99% 96%	95 1	2158 96
HODFZ16	1031085	636	blastx.2	(AB033168) nuclear protein ZAP [Mus musculus]	dbj|BAA85182.1|	86%	349	462
HWGAE28	1031316	637	blastx.2	member of DEAD box protein family [Homo sapiens]	emb|CAA49992.1|	99%	52	2271
HOFNZ21	1031328	638	blastx.2	valosin-containing protein [Sus scrofa]	gb|AAA31142.1|	65%	259	423
HOOKH25	1031329	639	blastx.2	(AC004472) TERA_HUMAN [Homo sapiens]	gb|AAC07984.1|	100%	279	2696
HDTIL75	1031435	640	blastx.2	(AK000031) unnamed protein product [Homo sapiens]	dbj|BAA90894.1|	99%	22	1092

HPRSB55	1031451	641	blastx.2	(AF168418) activating signal cointegrator 1 [Homo sapiens]	gb|AAF01278.1|	99%	9	1751
HPDPY36	1031606	642	blastx.2	(AF125182) single-strand selective monofunctional uracil DNA glycosylase [Homo sapiens]	gb|AAD17301.1|	100%	512	631
HETFJ47	1031922	643	blastx.2	(AF020797) AP-mu chain family member mu1B [Homo sapiens]	gb|AAD25870.1|AF020797_1	99%	60	1328
HMAMI21	1031988	644	blastx.2	hypothetical protein Rv0712 [Mycobacterium tuberculosis]	emb|CAB06436.1|	41%	365	1204
HCOQQ85	1032475	645	blastx.2	S100 calcium-binding protein A13 (S100A13) [Homo sapiens]	emb|CAA68188.1|	100%	379	672
HE2DQ62	1033653	646	blastx.2	putative T1/ST2 receptor binding protein precursor [Homo sapiens]	gb|AAC50419.1|	98%	105	785
HEBAE89	1034320	647	blastx.2	(AK000264) unnamed protein product [Homo sapiens]	dbj|BAA91040.1|	97%	260	400
HKDBF43	1034471	648	blastx.2	(AL049705) hypothetical protein [Homo sapiens]	emb|CAB41269.1|	100%	48	431
HVVCT43	1034539	649	blastx.2	novel ORF [Homo sapiens]	gb|AAB72234.1|	91% 100%	700 633	801 698

						91%	806	841
HTTDR30	1035435	650	blastx.2	(AF214634) polyA binding protein [Homo sapiens]	gb|AAF19993.1|AF214634_1	48%	693	986
HODGO46	1035602	651	blastx.2	unknown protein [Homo sapiens]	gb|AAA88036.1|	38%	468	115
HNTTB23	1035988	652	blastx.2	(AJ246001) spastin protein [Homo sapiens]	emb|CAB60141.1|	99%	93	974
HVVBV73	1036583	653	blastx.2	(AF013249) leukocyte-associated Ig-like receptor-1 [Homo 1	gb|AAB69324.1|	100%	439	1299
HTEPV42	1036973	655	blastx.2	(AK001738) unnamed protein product [Homo sapiens]	dbj|BAA91872.1|	99%	1	435
HFTCG52	1037108	656	blastx.2	(AF117723) seed maturation protein PM27 [Glycine max]	gb|AAD30426.1|AF117723_1	30%	286	786
HKAOB40	1037131	657	blastx.2	predicted using Genefinder; Similarity to Drosophila RNA 1 this gene [Caenorhabditis elegans]	emb|CAB01127.1|	32%	73	357

HPDVE37	1037303	658	blastx.2	cathepsin C [Homo sapiens]	emb|CAA60671.1|	100%	118	885
HTLES74	1037438	659	blastx.2	GAP-associated protein p190 - rat	pir|A38218|A38218	74% 56% 63% 41%	50 681 15 43	811 875 152 171
HCORG51	1037480	660	blastx.2	ubiquitin-like protein [Bos taurus]	gb|AAB49682.1|	100%	150	434
HPAMM72	1038344	661	blastx.2	nucleoside-diphosphate kinase [Homo sapiens]	emb|CAA68877.1|	99%	44	520
HKZAT03	1038378	662	blastx.2	endothelial cell growth factor [Homo sapiens]	gb|AAA60043.1|	100%	114	1559
HDQMA85	1038717	663	blastx.2	glutathione S-transferase [Homo sapiens]	gb|AAA35934.1|	100% 100%	234 110	356 235
HVCCQ82	1038718	664	blastx.2	glutathione S-transferase [Homo sapiens]	gb|AAA35934.1|	100%	114	578
HTGFP54	1038915	665	blastx.2	(AL080156) hypothetical protein [Homo sapiens]	emb|CAB45747.1|	94%	415	525
HBQDF41	1039017	666	blastx.2	beta-spectrin [Homo sapiens]	gb|AAA60580.1|	99% 20% 21% 22% 19% 22% 60%	1 7 28 16 1 184 2127	2172 2091 2151 2187 2118 2193 2351
HPAMC60	1039290	668	blastx.2	TRAF4-associated factor 2 [Homo	gb|AAD24202.1|U83194_1	100%	31	1242

				sapiens]				
HLMHM83	1039491	669	blastx.2	(AK001123) unnamed protein product [Homo sapiens]	dbj|BAA91513.1|	44%	158	616
HOUDK70	1039538	670	blastx.2	(AF091083) unknown [Homo sapiens]	gb|AAC72952.1|	100%	285	1142
HMEFK29	1039652	672	blastx.2	(AC002398) F25965_1 [Homo sapiens]	gb|AAB81199.1|	54% 100%	808 1	993 48
HAOSK79	1039663	673	blastx.2	(AJ223953) hPTTG [Homo sapiens]	emb|CAA11683.1|	100%	54	659
HPDRV42	1039689	674	blastx.2	P58 [Homo sapiens]	gb|AAC50331.1|	100%	135	1649
HOPJD35	1039703	675	blastx.2	(AF035262) BAF57 [Homo sapiens]	gb|AAC04509.1|	100%	121	1353
HTFNP84	1039748	676	blastx.2	ect2 [Mus musculus]	gb|AAA37536.1|	94% 42%	73 27	1227 125
HTHDT76	1039871	677	blastx.2	(AL117404) hypothetical protein [Homo sapiens]	emb|CAB55905.1|	98%	7	564
HSYEC21	1039891	678	blastx.2	adenosine triphosphatase [Homo sapiens]	gb|AAA35999.1|	99% 96% 37%	432 1 3819	2372 435 3890
HKGCO25	1040384	679	blastx.2	NAP [Homo sapiens]	gb|AAC37544.1|	99%	3	665
HNOJN70	1040385	680	blastx.2	(AF062594) nucleosome assembly protein [Rattus norvegicus]	gb|AAC67388.1|	100%	297	425
HADFS31	1040388	681	blastx.2	(AF214680) C3HC4-like zinc finger protein [Homo sapiens]	gb|AAF30180.1|	88% 92%	449 145	832 504

HJBDC89	1040569	682	blastx.2	nonhepatic arginase [Homo sapiens]	dbj|BAA13158.1|	100% 97%	113 651	661 1175
HTAIX75	1040591	683	blastx.2	(AK000897) unnamed protein product [Homo sapiens]	dbj|BAA91413.1|	47%	303	557
HODBO29	1040620	684	blastx.2	thioesterase II [Homo sapiens]	emb|CAA60024.1|	63%	84	527
HOCOF27	1040631	685	blastx.2	zinc-finger helicase [Homo sapiens]	gb|AAC39923.1|	91%	277	687
HSPSE88	1040694	686	blastx.2	tumor susceptibility protein [Homo sapiens]	gb|AAC52083.1|	100% 52%	110 68	922 175
HSKXM78	1040826	687	blastx.2	(AK001550) unnamed protein product [Homo sapiens]	dbj|BAA91751.1|	63% 75% 31%	1 108 505	654 398 618
HNLMB92	1040913	688	blastx.2	protein of unknown function [Homo sapiens]	gb|AAA63232.1|	96%	355	666
HE8ON57	1040925	689	blastx.2	(AF005855) anon2A5 [Drosophila melanogaster]	gb|AAB81486.1|	26%	50	415
HOCOC14	1040932	690	blastx.2	protein antigen [synthetic construct]	emb|CAA01182.1|	100%	539	1384
HOGDP49	1041049	691	blastx.2	bcn92 [Drosophila subobscura]	emb|CAB55311.1|	55%	226	474
HOFMK22	1041070	692	blastx.2	(AF161479) HSPC130 [Homo sapiens]	gb|AAF29094.1|AF161479_1	94%	3	356
HBGNT69	1041900	693	blastx.2	NF-AT3 gene product [Homo sapiens]	gb|AAA79175.1|	100% 71% 39%	111 3 421	428 212 612

						40%	455	586
HSPSJ42	1042462	694	blastx.2	ubiquitin-activating enzyme E1 [Homo sapiens]	gb|AAA61246.1|	100%	259	3432
HPDQD23	1042649	695	blastx.2	(AF055470) ZNF258 [Homo sapiens]	gb|AAD15797.1|	65%	174	338
HWMBA10	1042859	696	blastx.2	Mel-18 protein [Homo sapiens]	dbj|BAA03074.1|	95%	2717	2256
HETKL27	1042951	698	blastx.2	unknown [Homo sapiens]	gb|AAA76738.1|	40%	188	637
HPCTH04	1043273	699	blastx.2	ATL-derived factor/thioredoxin [Homo sapiens]	emb|CAA54687.1|	100%	180	494
HVVBM94	1043532	701	blastx.2	pre-pump-1 proteinase (AA -17 to 250) [Homo sapiens]	emb|CAA30678.1|	100%	52	852
HVVBC43	1043553	702	blastx.2	(AB000468) zinc finger protein [Homo sapiens]	dbj|BAA19122.1|	100%	301	870
HTPDM31	1044199	703	blastx.2	proline-rich protein MP2 - mouse (fragment)	pir|A24264|A24264	31% 34% 33% 34% 53% 39% 39% 39%	632 584 632 620 742 790 790 790	48 51 138 225 659 659 659 659

						41% 38%	790 790	662 662
HSQEK12	1044577	704	blastx.2	similar to Human Sp2 protein (M97190) [Homo sapiens]	dbj|BAA05923.1|	89% 48%	53 1	439 93
HPDRZ16	1044618	705	blastx.2	(AF106473) leucine-rich-domain inter-acting protein 1; LeR 1	gb|AAD17989.1|	72%	424	834
HVCBC44	1044635	706	blastx	CTP synthetase homolog [Mus musculus]	gb|AAB17729.1|	77%	3	896
HPIAC22	1044711	707	blastx.2	D-E-A-D box protein [Drosophila melanogaster]	gb|AAC14192.1|	42% 47%	749 20	1738 493
HSODA53	1044741	708	blastx.2	(AF213393) ATP-binding cassette protein [Mus musculus]	gb|AAF31432.1|	68% 73%	1316 1101	1657 1319
HE9ML74	1044760	709	blastx.2	coded for by C. elegans cDNA yk34b1.5; coded for by C. elegans 1 1 coded for by C. elegans cDNA yk46e8.3; coded fo	gb|AAB00699.1|	77% 41% 52% 21% 31%	940 465 6 315 450	1269 932 260 614 593
HPDRB76	1044762	710	blastx.2	adenylate kinase 2B [Homo sapiens]	gb|AAC13881.1|	100%	160	855
HSYDI55	1044769	711	blastx.2	(AF151819) CGI-61 protein [Homo sapiens]	gb|AAD34056.1|AF151819_1	100% 97%	309 1067	1067 1174
HOGCI31	1044821	712	blastx.2	(AL110271) hypothetical protein [Homo sapiens]	emb|CAB53709.1|	96%	34	558

HNOKX86	1044893	713	blastx.2	(AF092138) HSPC033 [Homo sapiens]	gb|AAD40380.1|	100%	303	575
HTPHG81	1045117	714	blastx.2	(AL117402) hypothetical protein [Homo sapiens]	emb|CAB55903.1|	100%	537	1538
HPCTV49	1045379	715	blastx.2	ribosomal protein [Homo sapiens]	gb|AAA36589.1|	100%	127	444
HHGDK68	1045464	716	blastx.2	(AL020993) dJ5O6.1 (casein kinase 1, epsilon) [Homo sapiens]	emb|CAA15888.1|	89% 100%	124 765	858 1013
HNOKM38	1045500	717	blastx.2	transducin (beta) like 1 protein [Homo sapiens]	emb|CAA73319.1|	99%	120	1640
HHFUN47	1045842	718	blastx.2	(AF099028) putative transmembrane protein cmp44E [Drosophila melanogaster]	gb|AAD12254.1|	49% 52% 27% 83%	2 2 1007 865	1135 952 2368 882
HE9EJ82	1046856	722	blastx.2	beta-signal sequence receptor [Homo sapiens]	dbj|BAA07206.1|	96%	24	173
HODHS68	1047137	724	blastx.2	(AK000826) unnamed protein product [Homo	dbj|BAA91390.1|	99%	528	1220

HOPKT59	1047169	725	blastx.2	p23 [Homo sapiens]	gb|AAA18537.1|	100%	335	814
HMCFK45	1047212	726	blastx.2	(AF182844) VPS28 protein [Homo sapiens]	gb|AAF00499.1|AF182844_1	100%	124	786
HPIAN63	1047381	727	blastx.2	(AF011792) cell cycle progression 2 protein [Homo sapiens]	gb|AAB69312.1|	100% 94% 78% 26% 38% 30%	206 586 770 107 762 589	586 786 892 505 935 687
HNSME49	1047403	728	blastx.2	predicted using Genefinder [Caenorhabditis elegans]	emb|CAB04731.1|	55%	114	554
HWEAC64	1047473	729	blastx.2	ORF X (AA 1 - 393) [Escherichia coli]	emb|CAA31134.1|	98%	167	700
HOCQI51	1047483	730	blastx.2	(AB034912) WD-repeat like sequence [Homo sapiens]	dbj|BAA92312.1|	99% 96% 46% 46%	99 967 939 1081	1004 1479 977 1119
HOPKE15	1047634	731	blastx.2	putative RNA-binding protein [Schizosaccharomyces pombe]	emb|CAB11047.1|	36% 30%	509 141	1432 401
HMAEL73	1047646	732	blastx.2	(AL157427) hypothetical protein [Homo sapiens]	emb|CAB75652.1|	100%	754	2463
HNOKE42	1047663	733	blastx.2	(AF116272) T-cell activation protein [Homo sapiens]	gb|AAD38498.1|AF116272_1	100%	65	445

HOFAE31	1047670	734	blastx.2	ubiquinol-cytochrome-c reductase (EC 1.10.2.2) 11K protein - bovine	pir|A00119|CCBO11	93% 92%	2 180	181 221
HNOAC93	1047820	736	blastx.2	(AB016092) RNA binding protein [Homo sapiens]	dbj|BAA83718.1|	100%	69	305
HMEJA45	1047848	737	blastx.2	(AF091242) ATP sulfurylase/APS kinase 2 [Homo sapiens]	gb|AAC64583.1|	87%	166	399
HLDAS11	1047937	738	blastx.2	Similar to Human C219-reactive peptide (L34688) [Homo sapiens]	dbj|BAA13448.1|	99% 91% 32%	233 52 503	958 249 907
HWMJB31	1048009	739	blastx.2	DARPP-32=DOPAMINE AND CAMP-REGULATED PHOSPHOPROTEIN.	sp|G545790|G545790	94%	169	729
HAZAA31	1048188	740	blastx.2	transketolase [Homo sapiens]	gb|AAA98961.1|	100% 76%	778 92	1959 1033
HOCMC83	1048300	741	blastx.2	hypothetical protein [Schizosaccharomyces pombe]	emb|CAB11599.1|	30%	446	1279
HCFCS40	1048427	742	blastx.2	(AK001123) unnamed protein product [Homo sapiens]	dbj|BAA91513.1|	46%	17	1231
HVCAA65	1048595	743	blastx.2	(AF022815) proteasome subunit XAPC7 [Homo sapiens]	gb|AAB81515.1|	100%	191	934

HSPSI76	1048635	744	blastx.2	prolyl 4-hydroxylase alpha (II) subunit [Homo sapiens]	gb|AAB71339.1|	99%	208	1578
HVVCH35	1048658	745	blastx.2	(AF177385) cytochrome c oxidase assembly protein isoform 2 [Homo sapiens]	gb|AAF05313.1|AF177385_1	99%	436	1233
HOFNI66	1048739	746	blastx.2	signal peptidase complex 25 kDa subunit [Canis familiaris]	gb|AAA21254.1|	95%	33	710
HMSKI90	1048792	747	blastx.2	unknown protein [Homo sapiens]	gb|AAA88038.1|	39% 28% 45% 100%	3258 1452 2039 327	2377 1180 1944 310
HSYBI49	1049151	748	blastx.2	(AF101051) senescence-associated epithelial membrane protein [Homo sapiens]	gb|AAD16433.1|	100%	173	805
HTXSN37	1049372	749	blastx.2	(AL080159) hypothetical protein [Homo sapiens]	emb|CAB45750.1|	47% 46%	1154 408	1861 530
HMUBT31	1049466	750	blastx.2	serine palmitoyltransferase, subunit I [Homo sapiens]	emb|CAA69941.1|	100%	11	1429
HFPDO90	1049644	751	blastx.2	Similarity to yeast hypothetical protein PIR accession number	emb|CAA94801.1|	100%	516	611

				1 1 this gene; cDNA EST yk504c7.3 comes from this gene; cDN				
HVVCB79	1050102	752	blastx.2	urokinase [synthetic construct]	emb|CAA00829.1|	95% 96%	213 1067	1139 1504
HDPGR19	1050167	753	blastx.2	(AL031733) dJ455J7.1 (cellular repressor of E1A-stimulated genes CREG) [Homo sapiens]	emb|CAB42866.1|	100%	11	670
HVVDX63	1050256	754	blastx.2	interferon regulatory factor 1 [Homo sapiens]	gb|AAA36043.1|	100%	212	1186
HNOJA87	1050282	755	blastx.2	NUCLEAR FACTOR ERYTHROID 2 RELATED FACTOR 2 (NF-E2 1 ERYTHROID DERIVED 2, LIKE 2) (HEBP1).	sp|Q16236|NFL2_HUMAN	99%	643	2415
HTPGI65	1050419	756	blastx.2	ESX [Homo sapiens]	gb|AAB58075.1|	100%	161	1273
HHFGN14	1050536	757	blastx.2	DNA binding protein [Homo sapiens]	dbj|BAA08565.1|	99% 97% 53% 31% 32% 40% 28% 46%	1818 405 121 203 465 3017 1464 2939	2738 995 810 421 833 3136 1784 2983
HTAIN76	1050553	758	blastx.2	(AF016903) agrin precursor [Homo	gb|AAC39776.1|	98% 96%	371 3	1300 416

				sapiens]		36%	614	1252
						32%	614	1291
						45%	3	416
						31%	3	440
						38%	386	721
						40%	426	557
						26%	98	430
						32%	465	665
						35%	19	198
						27%	1125	1331
						58%	3	38
						40%	541	648
						58%	155	196
HLYBO89	1050702	759	blastx.2	caltractin [Homo sapiens]	emb|CAA51467.1|	100%	42	557
HMEKJ82	1050767	760	blastx.2	serine/threonine protein kinase Krs-1 [Homo sapiens]	gb|AAB17261.1|	95%	196	597
HOFNX17	1050969	761	blastx.2	annexin I [Oryctolagus cuniculus]	gb|AAC78495.1|	91%	188	574
						45%	571	672
HAOSY21	1051095	762	blastx.2	(AF151048) HSPC214 [Homo sapiens]	gb|AAF36134.1|AF151048_1	85%	174	569
HMWDB39	1051115	763	blastx.2	V-1 protein [Rattus norvegicus]	dbj|BAA05167.1|	99%	245	598
HAOSZ53	1051246	764	blastx.2	(AF028823) Tax interaction protein 1 [Homo sapiens]	gb|AAB84248.1|	100%	56	403
HSODP14	1051256	765	blastx.2	p0071 protein [Homo sapiens]	emb|CAA57478.1|	82%	244	522
						96%	53	247
						53%	385	624

						39%	452	580
						34%	187	300
						43%	84	152
HWLXZ72	1051319	766	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	64%	413	159
						77%	886	860
HUSGQ45	1051410	767	blastx.2	(AK000101) unnamed protein product [Homo sapiens]	dbj|BAA90946.1|	100%	18	527
						37%	246	539
HLDRA54	1051437	768	blastx.2	cellular nucleic acid binding protein [Mus musculus]	gb|AAB60490.1|	100%	362	676
						86%	175	360
						51%	365	661
						51%	353	598
						38%	365	658
HNOJR48	1051533	769	blastx.2	(AJ251914) putative RNA helicase [Sus scrofa]	emb|CAB63856.1|	100%	94	1377
HKIXH35	1051883	770	blastx.2	Huntington Disease (HD) gene exon 1 [Homo sapiens]	emb|CAA92991.1|	65%	5	82
						47%	3194	3250
						40%	640	705
						56%	2905	2952
						42%	607	669
HHEBJ92	1051903	771	blastx.2	mannitol permease [Escherichia coli]	emb|CAA24748.1|	100%	184	2094
HPTGB84	1051953	772	blastx.2	(AF151871) CGI-113 protein [Homo sapiens]	gb|AAD34108.1|AF151871_1	100%	93	668
HVCCD05	1051983	773	blastx.2	neurofibromin [Homo sapiens]	gb|AAA59925.1|	96%	18	968
HPYSC40	1052158	774	blastx.2	(AL050169) hypothetical protein	emb|CAB43305.1|	100%	20	583

				[Homo sapiens]				
HDDMT56	1052261	775	blastx.2	(AF110775) adrenal gland protein AD-002 [Homo sapiens]	gb|AAF14858.1|AF110775_1	100%	158	844
HVVAW02	1052553	776	blastx.2	sorcin CP-22 [Homo sapiens]	gb|AAA60588.1|	100%	59	652
HOGCS42	1052557	777	blastx.2	(AB000712) CPE-receptor [Homo sapiens]	dbj|BAA22984.1|	100%	226	852
HAZAA59	1052593	778	blastx.2	CUG-BP/hNab50 [Homo sapiens]	gb|AAC50895.1|	90%	50	745
HMALJ21	1052874	780	blastx.2	(AC002397) C9 [Mus musculus]	gb|AAC36017.1|	52% 49% 40%	632 243 1826	1033 650 1915
HLYAR61	1053037	781	blastx.2	nuclear protein essential for dosage compensation [Caenorhabditis elegans]	gb|AAA92286.1|	64%	282	431
HLTCQ80	1053164	782	blastx.2	(AF064801) multiple membrane spanning receptor TRC8 [Homo sapiens]	gb|AAC39930.1|	87%	2	622
HDTDU67	1053171	783	blastx.2	54k protein (AA 1-504) [Canis familiaris]	emb|CAA34385.1|	100%	512	697
HMABL01	1053173	784	blastx.2	(AK001782) unnamed protein product [Homo sapiens]	dbj|BAA91907.1|	100%	609	1289

HACMU05	1053236	785	blastx.2	(AB002405) LAK-4p [Homo sapiens]	dbj|BAA24179.2|	99% 100% 60%	1804 1301 815	2631 1813 889
HOVDF79	1053369	786	blastx.2	pumilio protein [Drosophila melanogaster]	gb|AAB59189.1|	66% 28% 27%	39 42 42	653 518 521
HVVBJ54	1053547	787	blastx.2	CIRP [Homo sapiens]	dbj|BAA11212.1|	100%	95	610
HOFMU50	1053548	788	blastx.2	heparan sulfate 2-sulfotransferase [Cricetulus longicaudatus]	dbj|BAA20422.1|	90%	374	532
HE9MO38	1053585	789	blastx.2	phosphoenolpyruvate carboxykinase (GTP) [Homo sapiens]	emb|CAA72272.1|	100% 48% 53%	77 486 387	220 587 431
HOPJF55	1053725	790	blastx.2	microfibril-associated glycoprotein [Homo sapiens]	gb|AAA79920.1|	100%	150	698
HAOTD13	1053746	791	blastx.2	casein kinase-II beta [Oryctolagus cuniculus]	gb|AAA91892.1|	100%	164	808

HOCPT34	1053973	793	blastx.2	p0071 protein [Homo sapiens]	emb|CAA57478.1|	98%	1	2334
HFKHC64	1054015	794	blastx.2	(AF058448) herpesvirus entry protein B [Homo sapiens]	gb|AAC23797.1|	99%	178	1614
HOPKO37	1054085	795	blastx.2	drebrin E2 [Homo sapiens]	gb|AAA16256.1|	99%	2	1063
HNBVO53	1054122	796	blastx.2	p160 [Homo sapiens]	gb|AAC17708.1|	89% 46% 31% 36% 90% 31% 37%	50 639 1871 883 36 754 952	2332 1403 2380 1119 68 1101 1173
HCQDQ11	1054196	798	blastx.2	cytochrome c oxidase subunit 3 [Homo sapiens]	dbj|BAA77671.1|	93%	25	777
HTFML39	1054230	799	blastx.2	secreted cyclophilin-like protein [Homo sapiens]	gb|AAA36601.1|	100%	226	873
HOGCR32	1054235	800	blastx.2	similar to mouse CC1. [Homo sapiens]	dbj|BAA13194.1|	90% 62% 35%	15 160 128	110 204 169
HFCDL60	1054288	801	blastx.2	(AF005038) secretory carrier membrane protein [Homo sapiens]	gb|AAB62723.2|	99% 66%	152 2	919 46
HODEC13	1054400	802	blastx.2	(AC007059) Human homolog of Mus musculus wizL protein	gb|AAD19818.1|	87%	3	722

				[AA 4-1561] [Homo sapiens]				
HUSYA18	1054451	803	blastx.2	DNA/RNA-binding protein [Homo sapiens]	gb|AAA75623.1|	89% 28% 76% 39% 47%	35 161 1 591 3	553 484 39 689 59
HOCON42	1054527	804	blastx.2	DYNAMIN 2.	sp|P50570|DYN2_HUMAN	95% 74% 30% 28% 38%	545 162 1276 1666 2190	1588 734 1638 1914 2246
HKMNH37	1054550	805	blastx.2	(AL031115) ZXDA, ZXDB (zinc finger X-linked protein) [Homo sapiens]	emb|CAB36858.1|	50%	37	720
HPDWP21	1054662	806	blastx.2	(AF178534) talin [Homo sapiens]	gb|AAF27330.1|	99% 78%	63 35	797 76
HOGCS52	1054677	807	blastx.2	(AJ245621) CTL2 protein [Homo sapiens]	emb|CAB75542.1|	99%	36	1388
HWMCK60	1054751	808	blastx.2	(AF125099) HSPC038 protein [Homo sapiens]	gb|AAD39916.1|AF125099_1	100%	258	485
HWLOU33	1054790	809	blastx.2	lac repressor protein (gtg start codon) [Escherichia coli]	gb|AAA24052.1|	96%	18	401
HKZBM58	1054812	810	blastx.2	sin3 associated polypeptide p18 [Homo sapiens]	gb|AAC51322.1|	100%	126	584
HTEOV06	1054813	811	blastx.2	sin3 associated polypeptide p18 [Homo	gb|AAC51322.1|	95%	317	799

				sapiens]				
HTEHP29	1055174	813	blastx.2	protein related N-terminus of tre oncogene [Homo sapiens]	dbj|BAA02807.1|	97%	7	585
HNOJI32	1055248	814	blastx.2	PRAJA1 [Mus musculus]	gb|AAC00205.1|	73%	1084	1989
						45%	841	1620
						30%	100	948
						55%	1908	1985
HFPHF52	1055304	815	blastx.2	(AB006625) The human homolog of a mouse imprinted gene, Peg3. [Homo sapiens]	dbj|BAA22956.1|	98%	2	1348
						90%	1290	1682
						31%	251	979
						27%	62	1276
						30%	197	895
						24%	11	1333
						27%	44	1324
						26%	62	1273
						30%	146	895
						26%	5	856
						32%	605	1003
						24%	278	1147
						20%	35	979
						34%	221	484
						55%	1308	1445
						26%	1290	1676
						28%	1437	1676
						28%	596	829
						25%	1287	1769

						26%	1308	1676
						32%	1305	1499
						27%	1398	1676
						36%	905	979
						36%	1425	1499
						39%	1596	1679
						34%	1608	1676
						28%	1344	1502
HBNMF62	1055381	816	blastx.2	(AK000538) unnamed protein product [Homo sapiens]	dbj|BAA91239.1|	100%	314	625
						43%	752	859
HTPHO72	1055426	817	blastx.2	EF-hand protein [Homo sapiens]	emb|CAA55343.1|	100%	98	1048
HOPKL18	1055439	818	blastx.2	stromelysin-3 precursor [Homo sapiens]	emb|CAA40918.1|	100%	2	1438
HTXKD84	1055467	820	blastx.2	Hlark [Homo sapiens]	gb|AAC51293.1|	97%	111	581
						58%	571	1191
						55%	839	1006
HTXRR82	1055480	821	blastx.2	myosin IC [Dictyostelium discoideum]	gb|AAC37427.1|	42%	522	1310
						32%	1433	1504
HAIBU62	1055582	822	blastx.2	(AL133070) hypothetical protein [Homo sapiens]	emb|CAB61393.1|	99%	154	1518
HDTAY29	1055632	823	blastx.2	(AJ250865) TESS 2 [Homo sapiens]	emb|CAB65119.1|	99%	65	625
HCOQD79	1055767	824	blastx.2	(AF118394) putative	gb|AAD45242.1|AF1	98%	201	689

				nucleotide binding protein [Homo sapiens]	18394_1	100%	76	210
HAMHN12	1055899	825	blastx.2	Similarity to EGF domain; cDNA EST EMBL:T02406 comes from this gene [Caenorhabditis elegans]	emb|CAA94773.1|	28% 36%	53 263	559 562
HODIY67	1056000	826	blastx.2	(AF167160) protein inhibitor of activated STAT-1 [Homo sapiens]	gb|AAD49722.1|AF167160_1	99%	8	1957
HNTRS57	1056097	827	blastx.2	similar to ankyrin motifs; cDNA EST CEMSH89F comes from this 1 1 cDNA EST EMBL:D33056 comes from this gene; cDNA EST E	emb|CAA99881.1|	45%	2	853
HUKFL74	1056102	828	blastx.2	fsh-like protein [Mus musculus]	emb|CAA66186.1|	98%	1	168
HTEBF05	1056104	829	blastx.2	Wnt7a protein [Homo sapiens]	gb|AAC51319.1|	100%	9	344
HOPKD19	1056275	830	blastx.2	B-cell receptor associated protein [Homo sapiens]	gb|AAB51324.1|	100%	188	1084
HLICR58	1056290	831	blastx.2	(AF181467) protein Z-dependent protease inhibitor precursor [Homo sapiens]	gb|AAD53962.1|AF181467_1	98%	3	932

HAJAH48	1056400	833	blastx.2	IDN4-GGTR14 PROTEIN.	sp|Q9Y6Y5|Q9Y6Y5	100%	7	111
HSKJC61	1056407	834	blastx.2	(AF095448) putative G protein-coupled receptor [Homo sapiens]	gb|AAC98506.1|	100% 33%	366 265	1436 327
HEEBK29	1056454	835	blastx.2	(AF018081) type XVIII collagen [Homo sapiens]	gb|AAC39658.1|	95% 42% 43% 42% 46% 44% 45% 44% 38% 36% 26% 38% 35% 34% 37% 31% 25% 36% 44% 44% 29% 29% 32% 40%	1036 1036 1033 1036 1264 1429 1486 1036 1594 1327 1032 743 743 668 3777 1015 3672 3572 658 728 1432 2846 565 4021	3060 2118 2133 2166 2166 2118 2118 1632 2118 2109 2117 940 934 931 4139 1251 4190 3694 771 841 1587 3154 771 4119

784	677	38%				
901	749	37%				
910	707	27%				
2905	2753	35%				
3607	3524	32%				
3161	3120	50%				
3161	3087	40%				
3971	3789	27%				
3161	3108	50%				
3731	3579	33%				
3164	3087	40%				
1140	2129	40%				
1104	2108	37%				
1056	2129	35%				
1140	2039	38%				
1053	2129	37%				
1140	2015	37%				
1140	2105	39%				
1056	2129	35%				
1164	2108	32%				
1050	1910	35%				
1230	2111	38%				
1368	2108	37%				
1566	2111	38%				
1566	2111	37%				
1692	2039	43%				
1800	2105	43%				
1632	2108	38%				
1859	2707	30%				
1608	2108	37%				

								1863
								2204
								1046
								2207
								4695
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								3534
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								4643
								2050
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								2707
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								4135
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								2020
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								3015
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								3862
								3163
								2988
								4843
								2394
								1183
								894
								2825
								178
								2892
								2157
								4128
								4131
43%	30%	32%	32%	45%	28%	52%	32%	48%
37%	27%	29%	29%	51%	32%	33%	36%	32%
48%	28%	29%	33%	32%	30%	25%	33%	38%
36%	61%	50%						

						47%	2801	2751
HCHMM19	1056617	836	blastx.2	Lutheran blood group glycoprotein [Homo sapiens]	emb|CAA58449.1|	99%	10	1182
HE8NG02	1056625	837	blastx.2	(AL035608) dJ479J7.1 (similar to CHONDROMODULIN-1) [Homo sapiens]	emb|CAB55680.1|	93%	271	1011
HWHKD22	1056654	838	blastx.2	(AF094760) RFXANK [Homo sapiens]	gb|AAC69883.1|	59%	56	715
HOCPJ87	1056666	839	blastx.2	protein-tyrosine-phosphatase (EC 3.1.3.48) 11A - human	pir|A60345|A60345	99%	34	1125
HAAAA59	1056671	840	blastx.2	(AF151793) ALG-2 interacting protein 1 [Homo sapiens]	gb|AAF08220.1|AF151793_1	99% 56%	162 6007	2765 6048
HOSBJ18	1056672	841	blastx.2	finger protein 1, placental - human	pir|A32891|A32891	99% 68% 65% 65% 62% 61% 56% 40% 61%	752 830 914 998 590 548 482 2203 2239	2026 2095 2191 2221 1858 1774 1606 2322 2277
HUSGX12	1056736	842	blastx.2	GATA-6 [Homo sapiens]	dbj|BAA22621.1|	100%	2	838
HPDRG02	1056764	843	blastx.2	protein disulfide isomerase-related protein [Homo sapiens]	gb|AAA58460.1|	99% 42% 41%	26 26 1031	1405 523 1366

						40%	1055	1327
HKZBB48	1056767	844	blastx.2	(AB022663) HFB30 [Homo sapiens]	dbj|BAA78677.1|	100%	239	1660
HHAWB19	1056774	845	blastx.2	(AF140242) encephalopsin [Homo sapiens]	gb|AAD32671.1|AF140242_1	98%	111	1316
HHATP38	1056786	846	blastx.2	VEGF related factor isoform VRF167 precursor [Homo sapiens]	gb|AAA91463.1|	100%	87	650
HVVBE07	1056801	847	blastx.2	(AF003944) ovalbumin upstream promoter beta nuclear receptor rCOUPb [Rattus norvegicus]	gb|AAB61297.1|	97% 32%	702 185	983 328
HKAHB85	1056804	848	blastx.2	ear-2 gene product [Homo sapiens]	emb|CAA31282.1|	98%	4	831
HUSXA15	1056810	849	blastx.2	(AP000616) similar to RING-H2 finger protein RHA1a (AF078683) [Oryza sativa]	dbj|BAA85438.1|	75% 62%	300 295	205 167
HNOCH54	1056839	850	blastx.2	Protein sequence and annotation available soon via Swiss-Prot; 1 [Homo sapiens]	emb|CAA62188.1|	30% 26% 26% 23% 24% 24% 24% 26%	727 556 727 703 703 706 892 703	1833 1875 1779 1809 1782 1812 1827 1812

1782	727	24%				
1833	724	21%				
1827	733	24%				
1827	883	25%				
1824	856	26%				
1236	28	22%				
1833	883	23%				
1836	865	21%				
1827	856	22%				
1833	988	23%				
1836	730	22%				
852	4	24%				
876	1	25%				
1782	715	22%				
408	7	32%				
690	145	31%				
876	31	24%				
1830	976	23%				
456	1	28%				
852	31	25%				
885	16	22%				
1359	382	23%				
1527	745	23%				
843	22	20%				
906	1	26%				
408	7	28%				
411	1	26%				
1296	424	24%				
411	10	30%				
1251	724	23%				

690	259	25%				
411	22	31%				
1293	430	25%				
681	427	34%				
1635	1054	21%				
501	250	35%				
1251	427	24%				
1311	430	24%				
369	1	30%				
612	7	25%				
1383	427	23%				
678	352	28%				
1782	730	23%				
501	250	31%				
684	424	34%				
681	427	35%				
1743	1108	24%				
681	415	32%				
1356	430	26%				
675	313	26%				
681	427	29%				
690	322	27%				
675	322	27%				
690	430	30%				
693	343	30%				
1830	1648	36%				
684	430	33%				
675	412	31%				
1383	430	22%				
1929	1369	22%				

684	406	31%				
282	1	29%				
675	343	27%				
420	31	29%				
1401	430	22%				
681	430	32%				
675	337	27%				
411	184	27%				
1635	1012	23%				
843	406	28%				
753	337	26%				
1896	1627	27%				
1521	1120	23%				
1401	997	24%				
576	430	34%				
675	421	30%				
408	10	27%				
1785	1357	24%				
684	430	31%				
681	358	29%				
765	376	24%				
1803	1618	25%				
681	427	29%				
681	352	28%				
1308	427	25%				
678	424	32%				
690	349	25%				
501	259	29%				
1743	1108	22%				
1359	364	21%				

1554	1273	25%				
768	424	30%				
720	412	28%				
1383	961	25%				
693	427	30%				
1308	430	22%				
1311	409	22%				
1236	634	25%				
1383	430	21%				
1458	1123	21%				
576	427	31%				
690	430	31%				
1818	1648	31%				
1698	1267	25%				
678	427	27%				
681	421	28%				
654	418	26%				
1827	1651	28%				
1827	1648	30%				
1401	1072	22%				
1869	1288	24%				
573	388	29%				
771	424	27%				
1077	499	25%				
1953	1621	26%				
1635	1375	22%				
1527	1279	30%				
681	427	30%				
681	430	32%				
699	430	25%				

1812	1660	32%				
1830	1648	25%				
1830	1648	34%				
1782	1333	24%				
684	415	23%				
1827	1648	26%				
1644	1273	26%				
1254	1006	29%				
1527	1009	21%				
654	418	29%				
1533	1282	22%				
1827	1582	23%				
678	430	32%				
432	148	28%				
1488	1117	18%				
1812	1648	27%				
1509	1123	21%				
420	16	31%				
1827	1618	29%				
1527	1123	25%				
1347	1012	27%				
1644	1390	20%				
681	382	25%				
1782	1369	27%				
675	352	22%				
1311	427	23%				
678	427	25%				
654	430	32%				
684	427	25%				
693	430	29%				

684	424	27%				
1929	1648	23%				
1929	1648	28%				
1383	1018	28%				
1827	1651	25%				
1830	1648	22%				
1587	1384	26%				
1827	1648	26%				
1830	1648	24%				
1452	1012	21%				
621	430	32%				
1812	1669	27%				
1635	1393	23%				
1806	1648	30%				
1242	1123	32%				
1929	1369	23%				
1827	1648	25%				
567	427	34%				
1782	1648	40%				
1239	1057	28%				
1383	961	24%				
1554	1357	26%				
1800	1648	25%				
1518	976	22%				
1509	1222	28%				
1023	724	26%				
300	4	22%				
1560	1390	28%				
1554	1123	18%				
1818	1648	22%				

1245	907	20%					
1584	1288	25%					
1905	1075	20%					
1383	1120	22%					
1806	1207	21%					
675	409	26%					
411	28	25%					
1509	1285	22%					
435	16	26%					
1917	1648	25%					
1812	1648	23%					
1567	1463	37%					
1530	1072	18%					
1929	1369	21%					
1782	1648	24%					
1782	1642	25%					
1401	1012	22%					
454	338	27%					
1839	1651	22%					
1509	1174	23%					
1734	1357	26%					
1626	1369	23%					
1635	1375	21%					
1788	754	16%					
631	440	26%					
798	427	24%					
165	1	25%					
429	124	25%					
1800	1651	23%					
1830	1648	22%					

2095	2018	42%				
144	1	25%				
1314	1195	34%				
1362	979	22%				
144	67	34%				
1368	1123	30%				
1827	1648	20%				
1091	897	28%				
1458	1318	25%				
1929	1468	22%				
1827	1648	20%				
533	477	47%				
2018	1980	53%				
1236	1120	23%				
1175	993	33%				
1827	1651	22%				
1827	1648	22%				
1509	1375	24%				
2092	1910	24%				
1837	1733	25%				
1692	1648	53%				
528	397	29%				
1731	1369	20%				
2060	1878	27%				
1440	1336	31%				
1554	1327	25%				
1467	1120	23%				
1830	1648	21%				
2078	2031	43%				
1321	1256	40%				

						50%	814	849
						45%	1863	1928
						27%	127	393
						25%	1120	1236
HOCPP16	1056856	851	blastx.2	insulin-like growth factor binding protein 2 [Homo sapiens]	gb|AAA03246.1|	100%	36	650
HNOAH83	1056862	852	blastx.2	platelet-endothelial tetraspan antigen 3 [Homo sapiens]	gb|AAA87064.1|	100%	90	848
HE2OU10	1056875	853	blastx.2	OTK27 [Homo sapiens]	dbj|BAA23363.1|	100%	97	480
HODGM46	1056927	854	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	68%	5	229
HODFR44	1056990	855	blastx.2	(AL137516) hypothetical protein [Homo sapiens]	emb|CAB70782.1|	99%	11	469
						42%	14	343
						47%	20	319
						50%	71	313
						48%	14	274
						34%	14	403
						38%	14	313
						38%	38	313
HCHND12	1057009	856	blastx.2	(AF121963) receptor tyrosine kinase precursor [Gallus gallus]	gb|AAD31764.1|AF121963_1	77%	136	321
						77%	299	403
						37%	6	155
						42%	48	131
						32%	45	155
						42%	63	176
						38%	54	155

HBHAC29	1057157	857	blastx.2	myelin-associated glycoprotein precursor [Homo sapiens]	gb|AAA59545.1|	98% 90% 39% 100%	2 427 20 786	424 759 400 815
HTPFW87	1057170	858	blastx.2	carboxyl ester lipase [Homo sapiens]	gb|AAA51973.1|	98% 34% 39% 35% 37% 36% 36% 34% 34% 34%	5 1620 2154 2160 2136 2160 2160 2109 2010 1977	2206 2084 1687 1690 1687 1705 1768 1681 1687 1687
HISAF60	1057212	859	blastx.2	junctional adhesion molecule [Mus musculus]	gb|AAC32982.1|	38%	116	988
HRABO80	1057219	860	blastx.2	(AL050143) hypothetical protein [Homo sapiens]	emb|CAB43289.1|	100%	1590	1937
HADDF30	1057260	861	blastx.2	transcription regulatory protein Evi-1, short form - human	pir|B60191|B60191	98% 22%	1 7	1155 858
HDAAS58	1057272	862	blastx.2	(AC005003) similar to zinc finger protein MAZ [Homo sapiens]; similar to AAB04121.1 (PID:g995935)	gb|AAF01349.1|AC005003_1	77%	263	676
HSDZG15	1057307	863	blastx.2	Homology with Squid retinal-binding protein	emb|CAA91418.1|	68% 47%	3 1212	713 1274

				(PIR Acc. No. 1 1				
HPDVY52	1057393	864	blastx.2	laminin alpha 5 chain [Mus musculus]	gb|AAC53430.1|	64% 47%	6 1165	1196 1380
HHESW02	1057478	865	blastx.2	(AF062075) leupaxin [Homo sapiens]	gb|AAC16014.1|	100% 34%	95 896	1252 1258
HVVBW84	1057561	866	blastx.2	(AB003184) ISLR [Homo sapiens]	dbj|BAA22848.1|	100%	342	1625
HSLJC80	1057797	868	blastx.2	prolargin [Homo sapiens]	gb|AAC18782.1|	32% 32% 28% 28% 29% 34%	353 899 686 1109 1663 262	1228 1573 1420 1657 1980 357
HEOAD12	1057842	869	blastx.2	(AF116865) hedgehog-interacting protein [Mus musculus]	gb|AAD31172.1|AF116865_1	70%	533	1069
HVVBT41	1057880	870	blastx.2	(AL035587) dJ475N16.1 (CTG4A) [Homo sapiens]	emb|CAB75301.1|	100%	439	1272
HAZAE42	1057915	871	blastx.2	cellular retinol binding protein [Homo sapiens]	emb|CAA30318.1|	100%	255	659
HPRBN60	1057948	872	blastx.2	(AF002282) alpha-actinin-2 associated LIM protein [Homo sapiens]	gb|AAC16672.1|	99%	72	1019
HOVCZ68	1057958	873	blastx.2	follistatin 1 precursor - human	pir|A32141|A32141	99%	1	987
H6EDF71	1057979	874	blastx.2	antigenic surface determinant OA3	emb|CAA49196.1|	99%	92	1021

				[Homo sapiens]				
HCOOF60	1058001	875	blastx.2	ubiquitin carrier protein E2 - human	pir|B42856|B42856	99%	133	855
HVVBH81	1058059	876	blastx.2	hnRNP U protein [Homo sapiens]	emb|CAA46472.1|	99%	227	2644
HSPTJ51	1058172	877	blastx.2	SWI/SNF complex 155 KDa subunit [Homo sapiens]	gb|AAC50693.1|	95% 90% 29%	51 51 45	1004 1043 1055
HOPKC80	1058174	878	blastx.2	(AJ011497) Claudin-7 [Homo sapiens]	emb|CAA09626.1|	99%	348	980
HOCPT58	1058250	879	blastx.2	(AF037261) SH3-containing adaptor molecule-1 [Homo sapiens]	gb|AAC09244.1|	100% 94%	121 19	765 126
HPCTP25	1058287	880	blastx.2	gamma-aminobutyraldehyde dehydrogenase [Homo sapiens]	gb|AAB18827.1|	98%	72	1553
HODKM52	1058305	881	blastx.2	(AB008789) grb7 protein [Homo sapiens]	dbj|BAA29059.1|	98%	58	999
HCONB89	1058316	882	blastx.2	acid ceramidase [Homo sapiens]	gb|AAC50907.1|	99%	118	1302
HBPND88	1058432	884	blastx.2	carboxyl terminal LIM domain protein [Homo sapiens]	gb|AAC05580.1|	99%	142	1128
H6EEO05	1058438	885	blastx.2	(AL117423) hypothetical protein [Homo sapiens]	emb|CAB55915.1|	99%	100	1527
HFIVR61	1058451	886	blastx.2	interferon beta 2a	emb|CAA00839.1|	99%	214	777

				[Homo sapiens]				
HVVBX28	1058458	887	blastx.2	SH3 domain-containing protein SH3P17 [Homo sapiens]	gb|AAC50592.1|	96% 49% 36%	53 308 104	493 466 301
HVVBI38	1058475	888	blastx.2	factor H [Homo sapiens]	emb|CAA68704.1|	99% 25% 26% 25% 28% 27%	294 336 294 501 1083 1185	2291 2264 2291 2219 2288 2099
HUKEJ46	1058539	889	blastx.2	(AF081507) signaling molecule LEFTY-B [Homo sapiens]	gb|AAC33967.1|	98% 99%	479 70	1165 489
HDTFT47	1058588	890	blastx.2	lymphocyte antigen [Homo sapiens]	gb|AAA36236.1|	98% 91%	2 258	268 398
HSSFS71	1058596	891	blastx.2	ESP1/CRP2 [Homo sapiens]	dbj|BAA07703.1|	95% 77% 34%	29 41 219	460 265 512
HSDJH63	1058612	892	blastx.2	(AB045180) toll-like receptor 9 [Homo sapiens]	dbj|BAB19259.1|	92% 100% 52% 45% 58%	192 107 128 122 131	1358 190 184 181 181
HAHGD24	1058622	893	blastx.2	laminin alpha 5 chain [Mus musculus]	gb|AAC53430.1|	61%	80	1024
HTAEV85	1058723	894	blastx.2	(AJ005566) SPR2H protein [Mus musculus]	emb|CAA06595.1|	43% 64% 50% 35%	408 2500 1784 544	256 2459 1719 485
HPMME44	1058928	895	blastx.2	HCMVUL126 [human	emb|CAA35328.1|	96%	78	329

				herpesvirus 5]				
HSPSG28	1058977	897	blastx.2	26S protease subunit [Sus scrofa]	emb|CAA61863.1|	99% 88%	483 56	1679 82
HTGFW12	1059006	898	blastx.2	homolog of yeast mutL gene [Homo sapiens]	gb|AAA63923.1|	98% 94% 68%	83 1522 1431	1438 2670 1667
HOFMT75	1059050	899	blastx.2	cathepsin D [Homo sapiens]	gb|AAA51922.1|	87% 80%	7 414	456 743
HARNB17	1059085	900	blastx.2	HCMVUL126 [human herpesvirus 5]	emb|CAA35328.1|	98%	241	492
HPDRG65	1059102	901	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	69% 69% 83%	434 253 288	273 128 253
HAOSG15	1059145	902	blastx.2	(AF026291) chaperonin containing t-complex polypeptide 1, delta subunit; CCT-delta [Homo sapiens]	gb|AAC96010.1|	100%	160	1776
HHEND31	1059180	903	blastx.2	(AF117330) unknown [Rattus norvegicus]	gb|AAD26207.1|AF117330_1	73%	175	1827
HBMSN62	1059186	904	blastx.2	ZZ:beta-Gal' IgG-binding fusion protein [unidentified cloning 1	gb|AAB00807.1|	86%	1102	1251
HOVCJ46	1059241	905	blastx.2	(AF037272) WAP four-disulfide core	gb|AAC40055.1|	87% 70%	41 175	214 336

HWLEP14	1059394	906	blastx.2	(AF117646) long CBL-3 protein [Homo sapiens]	gb|AAD34341.1|AF117646_1	99%	92	1348
HDABR73	1059532	908	blastx.2	bikunin [Homo sapiens]	gb|AAC02781.1|	100%	436	1191
HOGAJ24	1059626	909	blastx.2	Similar to Human tesican (S33293) [Homo sapiens]	dbj|BAA13404.1|	100%	427	1698
HTJMV05	1059692	910	blastx.2	protein tyrosine phosphatase [Homo sapiens]	gb|AAA50779.1|	100%	5	685
HOOIL70	1059710	911	blastx.2	hematopoietic cell phophatase [Homo sapiens]	gb|AAA35963.1|	100% 37% 32% 30%	212 188 2209 2219	1996 508 2310 2296
HUNAE87	1059743	912	blastx.2	(AF062317) p120 catenin isoform 1B [Homo sapiens]	gb|AAC39802.1|	99%	158	955
HTPHO01	1059764	913	blastx.2	(AF169284) LIM and cysteine-rich domains protein 1 [Homo 1	gb|AAF34411.1|	97%	125	1048
HDPWK69	1059784	914	blastx.2	(AL031629) similar to RNA recognition motif. (aka RRM, RBD, or 1 1	emb|CAA20980.2|	52%	275	496

HPCOK03	1059849	915	blastx.2	(AF008551) aurora-related kinase 1 [Homo sapiens]	gb|AAC12708.1|	99%	59	1267
HOOJC15	1059967	917	blastx.2	(AL117639) hypothetical protein [Homo sapiens]	emb|CAB56027.1|	98%	575	1216
HODFG47	1059969	918	blastx.2	(AF132856) suppressor of G2 allele of skp1 homolog [Homo sapiens]	gb|AAD30062.1|	100%	215	1213
HBIPC05	1060137	919	blastx.2	(AF078798) extracellular signal-regulated kinase 7; ERK7 [Rattus norvegicus]	gb|AAD12719.1|	62%	23	832
HOPJJ32	1060193	920	blastx.2	replication protein A 14kDa subunit [Homo sapiens]	gb|AAA58350.1|	100%	447	635
HNOBN20	1060382	921	blastx.2	unknown protein [Homo sapiens]	gb|AAA88036.1|	43% 47%	1362 1487	1150 1380
HOCPX74	1060391	922	blastx.2	(AL137714) hypothetical protein [Homo sapiens]	emb|CAB70887.1|	91%	18	656
HTEPP27	1060415	923	blastx.2	PF20 [Chlamydomonas reinhardtii]	gb|AAB41727.1|	39%	207	581
HLYAJ79	1060495	924	blastx.2	ATPase subunit 6 [Homo sapiens]	dbj|BAA07295.1|	79%	197	808
HCOOQ11	1060656	925	blastx.2	sialidase [Homo sapiens]	emb|CAA55356.1|	70% 100%	1 189	189 308

HWMGI51	1060711	926	blastx.2	hypothetical protein [Synechocystis sp.]	dbj|BAA10294.1|	41%	16	615
HDPJG33	1060780	927	blastx.2	GTP binding protein [Mus musculus]	emb|CAA36803.1|	78% 68% 37%	543 439 933	863 699 1061
HLYAE20	1060967	928	blastx.2	hypothetical protein 2 (rRNA external transcribed spacer) - 1	pir|S12206|S12206	67%	1002	1259
HKZAR86	1060972	929	blastx.2	ERF-2 [Homo sapiens]	emb|CAA55592.1|	99%	322	1302
HAOTX62	1061036	930	blastx.2	SPIN protein [Homo sapiens]	emb|CAA75163.1|	100%	77	298
HOCQG58	1061180	931	blastx.2	26S PROTEASOME REGULATORY SUBUNIT S2 (P97) (TUMOR 1 1	sp|Q13200|PSD2_HUMAN	100%	63	2786
HOFNH33	1061185	932	blastx.2	MRAS2 gene product [Mucor racemosus]	gb|AAA83994.1|	31%	260	823
HAJAQ63	1061238	933	blastx.2	matrin 3 [Rattus norvegicus]	gb|AAB63955.1|	90% 94% 54% 98% 24% 31% 35% 35% 40%	1038 293 2361 3308 2634 2646 1755 3362 3837	2570 1105 2810 3478 2813 2759 1847 3454 3896
HVVBK70	1061258	934	blastx.2	(AJ000414) Cdc42-interacting protein 4 [Homo sapiens]	emb|CAA04062.1|	92% 100% 28%	653 31 627	1276 468 1055
HVVBA82	1061332	935	blastx.2	(AL022313)	emb|CAA18439.1|	100%	3	500

				dJ1119A7.1 (mitochondrial thioredoxin) [Homo sapiens]					
HWLLG38	1061388	936	blastx.2	neurocalcin [Bos taurus]	dbj|BAA01706.1|	100%	114	692	
HTPCH84	1061466	937	blastx.2	(AF104419) decoy receptor 3 [Homo sapiens]	gb|AAD03056.1|	99% 100%	103 938	945 1000	
HLGDA34	1061543	939	blastx.2	(AK000496) unnamed protein product [Homo sapiens]	dbj|BAA91205.1|	71% 73%	3 1766	254 1641	
HAICB08	1061629	940	blastx.2	rhoHP1 [Homo sapiens]	dbj|BAA19652.1|	100%	3	326	
HVVAW60	1061694	941	blastx.2	(AF151882) CGI-124 protein [Homo sapiens]	gb|AAD34119.1|AF151882_1	100%	244	741	
HPDVB50	1061708	942	blastx.2	(AJ002030) progresterone binding protein [Homo sapiens]	emb|CAA05152.1|	100%	33	206	
HAZAY40	1061765	943	blastx.2	tight junction (zonula occludens) protein ZO-1 [Homo sapiens]	gb|AAA02891.1|	100%	3	1631	
HACMZ51	1061766	944	blastx.2	contains 10 ankyrin-like repeats; similar to human ankyrin, 1 bursaria Chlorella virus 1]	gb|AAC96986.1|	33% 28% 32% 30%	118 73 100 88	957 726 657 561	
HUXAL63	1061790	945	blastx.2	100 kDa protein [Rattus norvegicus]	emb|CAA45756.1|	98%	2	1300	

HLCLX57	1061886	946	blastx.2	latent transforming growth factor-beta-binding protein-2, 1 1	gb|AAB37459.1|	99%	3	953
						37%	447	941
						32%	27	398
						34%	21	398
						45%	696	941
						40%	693	914
						41%	696	941
						42%	681	929
						38%	666	941
						36%	693	914
						32%	666	989
						34%	684	929
						34%	657	929
						34%	666	941
						43%	12	167
						35%	696	929
						45%	6	149
						47%	15	149
						31%	9	377
						46%	3	155
						35%	678	914
						40%	3	149
						29%	9	365
						35%	3	155
						38%	3	143
						40%	246	371
						41%	837	944
						34%	3	143
						29%	15	188
						28%	99	215

						35%	118	252
						22%	280	483
						57%	427	468
HMALF63	1061935	947	blastx.2	factor activating exoenzyme S [Bos taurus]	gb|AAA30514.1|	99%	519	1130
HACMR36	1062057	948	blastx.2	(AK000963) unnamed protein product [Homo sapiens]	dbj|BAA91446.1|	86%	181	1290
						99%	29	391
						27%	1141	1323
						34%	1460	1528
						33%	1710	1805
						27%	1883	2170
						50%	1506	1553
HAOSM08	1062079	949	blastx.2	(AF059617) serum-inducible kinase [Homo sapiens]	gb|AAC14573.1|	99%	284	2338
HTEFM89	1062084	950	blastx.2	(AF162680) STRIN protein [Homo sapiens]	gb|AAD46623.2|AF162680_1	99%	500	1234
HCHAK72	1062123	951	blastx.2	(AF113596) mosaic serine protease epitheliasin [Mus musculus]	gb|AAF21308.1|	47%	95	1165
HPAME12	1062139	952	blastx.2	retinoic acid- and interferon-inducible 58K protein RI58 [Homo sapiens]	gb|AAA84934.1|	100%	209	1654
HCE4F10	1062309	954	blastx.2	(AL050060) hypothetical protein [Homo sapiens]	emb|CAB43253.1|	97%	798	1535

HBCBE63	1062328	955	blastx.2	(AF007170) unknown [Homo sapiens]	gb|AAC39582.1|	100% 69% 87% 57%	191 87 25 1	790 251 96 63
HSSJO19	1062346	956	blastx.2	endonuclease G [Bos taurus]	emb|CAA51320.1|	97% 24%	361 1093	248 887
HE8NQ23	1062369	957	blastx.2	(AF062006) orphan G protein-coupled receptor HG38 [Homo sapiens]	gb|AAC28019.1|	99% 100% 87%	574 416 171	1419 571 263
HTELJ95	1062431	958	blastx.2	(AB006679) ATP binding protein [Homo sapiens]	dbj|BAA21881.1|	99%	272	949
HTPCP50	1062435	959	blastx.2	(AF111069) latrophilin 2 splice variant baaae [Bos taurus]	gb|AAD05305.1|	38% 47%	417 1997	2129 2044
HFKIT82	1062544	961	blastx.2	(AF152495) protocadherin beta 2 [Homo sapiens]	gb|AAD43756.1|AF152495_1	98% 30% 26%	2 20 26	1663 1297 1267
HE2LW42	1062574	962	blastx.2	(AF090934) PRO0518 [Homo sapiens]	gb|AAF24048.1|AF090934_1	100%	1267	1079
HOGCE44	1062586	963	blastx.2	protein tyrosine phosphatase (EC 3.1.3.48) [Homo sapiens]	gb|AAA36528.1|	99%	156	2561
HOVJJ72	1062626	964	blastx.2	latent TGF-beta binding protein-4 [Homo sapiens]	emb|CAA73944.1|	85% 91% 85%	547 203 1	1782 559 204

1728	562	30%				
363	1	45%				
1296	16	29%				
885	16	30%				
1869	1537	33%				
1920	1132	33%				
276	4	41%				
1926	1465	32%				
198	1	48%				
1761	1507	38%				
1734	1435	35%				
1761	1474	36%				
1881	1366	29%				
198	4	47%				
1116	553	29%				
1743	1453	38%				
198	34	36%				
153	16	34%				
583	212	23%				
268	209	60%				
1164	562	25%				
268	215	66%				
298	215	53%				
268	206	42%				
556	410	32%				
280	215	52%				
268	215	55%				
328	212	38%				
301	212	40%				
493	245	29%				

						37%	215		346
						37%	212		307
						42%	209		271
						29%	4		210
						55%	215		265
						30%	212		310
						29%	841		921
						32%	1766		1930
						32%	1667		1861
						58%	230		265
						29%	215		460
						56%	1764		1838
						58%	1792		1842
						63%	1859		1891
						40%	1391		1450
						37%	12		95
						37%	254		406
						66%	549		584
						87%	838		569
						34%	1633		1421
						69%	2007		1969
						30%	1621		1421
						38%	1024		938
						30%	1552		1352
						63%	1525		1493
						70%	1295		1266
HODBT14	1062628	965	blastx.2	guanine nucleotide exchange factor [Homo sapiens]	gb|AAA35914.1|	100%	15		320
HBOEB83	1062629	966	blastx.2	thrombospondin-4	emb|CAA79635.1|	95%	4		1392

HODCT96	1062631	967	blastx.2	repressor transcriptional factor [Homo sapiens]	gb|AAA79179.1|	74%	2	247
						74%	2	247
						73%	2	247
						56%	2	337
						40%	2	514
						69%	2	247
						69%	2	247
						41%	2	490
						78%	250	468
						67%	2	247
						66%	2	259
						71%	250	468
						73%	250	462
						77%	259	468
						71%	250	468
						75%	250	456
						70%	250	471
						69%	250	468
						71%	250	468
						64%	250	468
						63%	250	468
						72%	250	423
						38%	2	313
						49%	253	459
HTXJE60	1062655	968	blastx.2	(AK000642) unnamed protein product [Homo sapiens]	dbj|BAA91301.1|	50%	171	1112
HUSIQ62	1062679	969	blastx.2	high mobility group 2 protein [Homo sapiens]	gb|AAA58659.1|	100%	188	814
						31%	143	472

HKBAK29	1062718	971	blastx.2	(AF161525) HSPC177 [Homo sapiens]	gb|AAF29140.1|AF161525_1	100% 93%	975 42	1562 140
HPMCX26	1062743	972	blastx.2	LIMK-2 [Homo sapiens]	dbj|BAA08312.1|	97%	365	649
HFKHF51	1062785	973	blastx.2	(AF177203) cerebral cell adhesion molecule [Homo sapiens]	gb|AAD51367.1|AF177203_1	99%	360	1910
HUCPE28	1062795	974	blastx.2	extensin [Volvox carteri]	emb|CAA46283.1|	36% 36% 36% 38% 27%	728 728 735 734 119	1063 958 1055 949 460
HPWAH30	1062840	975	blastx.2	zinc finger protein [Homo sapiens]	gb|AAA59469.1|	98% 77% 76% 76% 81% 75% 77% 75% 74% 76% 74% 75% 74%	1 1 1 1 1 1 1 1 1 1 1 10 1	705 705 705 705 666 702 696 705 705 705 705 705 705

705	1	74%					
705	1	72%					
705	1	73%					
705	1	72%					
705	1	71%					
705	1	72%					
705	1	71%					
705	1	71%					
705	1	71%					
705	1	71%					
705	1	70%					
705	1	71%					
705	1	71%					
705	1	71%					
705	1	71%					
705	1	67%					
705	1	63%					
705	163	59%					
815	702	52%					
815	723	51%					
815	723	51%					
815	702	42%					
815	723	48%					
815	702	42%					
815	723	45%					
815	702	39%					
815	723	45%					
815	702	39%					
815	702	39%					
815	726	46%					
815	723	45%					

						36%	702	815		
						42%	723	806		
						36%	702	815		
						41%	723	815		
						41%	723	815		
						41%	723	815		
						42%	726	809		
						43%	726	815		
						43%	726	815		
						43%	726	815		
H6EDQ51	H6EDQ51R	976	blastx.2	cytochrome b [Homo sapiens]	gb|AAA19775.1|	95%	10	210		
HA5AU29	HA5AU29R	977	blastx.2	amyloid-beta protein [Homo sapiens]	gb|AAB59501.1|	85%	2	190		
HACBX26	HACBX26 R	978	blastx.2	NADH dehydrogenase subunit 1 [Homo sapiens]	dbj|BAA07290.1|	89%	2	259		
HACMH72	HACMH72 R	982	blastx.2	TraC protein (gtg start codon) [Plasmid F]	gb|AAA24905.1|	93%	35	478		
HACMS55	HACMS55 R	985	blastx.2	(AF013215) ribosomal protein S2 [Bos taurus]	gb|AAB65437.1|	100%	3	116		
HACMX77	HACMX77 R	986	blastx.2	protein kinase C inhibitor-I [Homo sapiens]	gb|AAA82926.1|	100%	42	419		
HACMZ45	HACMZ45 R	987	blastx.2	Keratin 8 [Homo sapiens]	emb|CAA52882.1|	100%	3	245		

HACND54	HACND54R	988	blastx.2	(AC003956) acetolactate synthase [Homo sapiens]	gb|AAB94632.1|	67% 78%	2 267	466 404
HACNF21	HACNF21R	991	blastx.2	40-kDa keratin protein [Homo sapiens]	gb|AAA36044.1|	86%	3	608
HACNF41	HACNF41R	992	blastx.2	cytokeratin 8 (279 AA) [Homo sapiens]	emb|CAA31376.1|	100%	2	91
HACNI47	HACNI47R	993	blastx.2	ribosomal protein S17 [Homo sapiens]	gb|AAA60284.1|	95%	96	500
HADET44	HADET44R	996	blastx.2	URF 1 (NADH dehydrogenase subunit) [Homo sapiens]	emb|CAA24026.1|	95% 92%	62 481	481 522
HAHHD12	HAHHD12R	998	blastx.2	(AF016252) Spinophilin [Rattus norvegicus]	gb|AAB72005.1|	96%	1	96
HALSG11	HALSG11R	999	blastx.2	(AC004544) cytochrome C oxidase; match to P14406 (PID:g117121) [Homo sapiens]	gb|AAC12952.1|	74% 74%	116 54	376 134
HAOSB87	HAOSB87R	1002	blastx.2	delta- aminolevulinate synthase (housekeeping) [Homo sapiens]	emb|CAA39794.1|	73%	1	549
HAOSE70	HAOSE70R	1004	blastx.2	acidic ribosomal phosphoprotein (P1) [Homo sapiens]	gb|AAA36471.1|	88% 55%	166 273	267 359
HAOSF68	HAOSF68R	1005	blastx.2	laminin-binding protein [Homo sapiens]	gb|AAA36161.1|	90%	76	576

HAOSG95	HAOSG95 R	1006	blastx.2	ribosomal protein S20 [Homo sapiens]	gb|AAA60286.1|	82%	111	452
HAOSI79	HAOSI79R	1007	blastx.2	ribosomal protein L7 [Homo sapiens]	gb|AAA03081.1|	95%	10	330
HAOSJ27	HAOSJ27R	1008	blastx.2	polyubiquitin - tobacco hornworm (fragments)	pir|JH0302|JH0302	100% 100% 75% 73% 49% 39% 72%	2 2 135 135 156 223 223	142 142 233 224 332 405 255
HAOSJ33	HAOSJ33R	1009	blastx.2	lactate dehydrogenase-A [Homo sapiens]	emb|CAA26879.1|	95%	3	353
HAOSK38	HAOSK38 R	1011	blastx.2	Ku protein subunit [Homo sapiens]	gb|AAA36155.1|	100%	4	303
HAOSL36	HAOSL36R	1012	blastx.2	S-adenosylhomocysteine hydrolase [Homo sapiens]	gb|AAA51681.1|	94% 96% 71% 88%	30 224 336 1	200 379 494 27
HAOSL47	HAOSL47R	1013	blastx.2	(AF155581) proteasome subunit beta 7 [Danio rerio]	gb|AAD53521.1|AF155581_1	91% 93% 55% 80%	86 4 432 340	343 96 572 429
HAOTE06	HAOTE06R	1021	blastx.2	(AF132947) CGI-13 protein [Homo sapiens]	gb|AAD27722.1|AF132947_1	98%	2	451
HAOTF90	HAOTF90R	1023	blastx.2	carboxyl methyltransferase [Homo sapiens]	dbj|BAA02991.1|	94%	3	170
HAOTI07	HAOTI07R	1026	blastx.2	HL23 ribosomal protein [Homo sapiens]	emb|CAA39417.1|	96% 84%	36 398	365 454

HAOTT79	HAOTT79R	1027	blastx.2	CYTOSKELETON-ASSOCIATED PROTEIN CKAPI (TUBULIN FOLDING COFACTOR B).	sp|Q99426|CKAP_HUMAN	88% 53%	9 332	356 376
HAOTU79	HAOTU79R	1028	blastx.2	ME491 antigen precursor (AA -1 to 237) [Homo sapiens]	emb|CAA30792.1|	97%	57	452
HAOTW22	HAOTW22R	1029	blastx.2	KERATIN, TYPE II CYTOSKELETAL 8 (CYTOKERATIN 8) (K8) (CK 1	sp|P05787|K2C8_HUMAN	100%	1	201
HAPNK45	HAPNK45R	1032	blastx.2	cytochrome c oxidase subunit 1 [Homo sapiens]	dbj|BAA07292.1|	90% 79% 90% 100%	2 274 473 261	262 516 535 281
HAPPR43	HAPPR43R	1033	blastx.2	hypothetical 18K protein - goldfish mitochondrion	pir|JC1348|JC1348	42%	146	472
HAQML40	HAQML40R	1035	blastx.2	ribosomal protein L39 [Homo sapiens]	dbj|BAA11465.1|	98%	106	258
HAUAK54	HAUAK54R	1037	blastx.2	CAG-isl 7 [Homo sapiens]	gb|AAC16021.1|	62%	12	245
HAZAC68	HAZAC68R	1042	blastx.2	lumican [Homo sapiens]	gb|AAA91639.1|	97% 26% 36%	3 3 3	587 551 500
HAZAD13	HAZAD13R	1043	blastx.2	human elongation factor-1-delta [Homo sapiens]	emb|CAA79716.1|	74% 60%	53 250	478 555

HAZAE44	HAZAE44R	1045	blastx.2	fibronectin precursor [Homo sapiens]	emb|CAA26536.1|	98% 46% 40% 39% 36% 35% 33%	84 105 105 123 69 105 18	512 335 413 347 392 344 347
HAZAG23	HAZAG23 R	1046	blastx.2	unnamed protein product [Homo sapiens]	emb|CAA62211.1|	96%	2	466
HAZAI89	HAZAI89R	1051	blastx.2	KERATIN, TYPE II CYTOSKELETAL 8 (CYTOKERATIN 8) (K8) (CK 1	sp|P05787|K2C8_HUMAN	100%	72	260
HAZAJ72	HAZAJ72R	1052	blastx.2	protein arginine N-methyltransferase [Rattus norvegicus]	gb|AAC52622.1|	97% 58% 81% 34%	1 497 579 537	537 580 611 605
HAZAQ80	HAZAQ80 R	1053	blastx.2	(AF064205) dynactin 1 p135 isoform [Homo sapiens]	gb|AAD55812.1|	100%	84	389
HAZBI39	HAZBI39R	1056	blastx.2	(AL031427) dJ167A19.3 (novel protein) [Homo sapiens]	emb|CAB46723.1|	100%	83	424
HAZBJ69	HAZBJ69R	1057	blastx.2	transmembrane protein	emb|CAA66947.1|	100%	3	323

				[Oryctolagus cuniculus]				
HBJHY72	HBJHY72R P00B	1063	blastx.2	(AL117434) hypothetical protein [Homo sapiens]	emb|CAB55922.1|	98%	1	297
HBXCG52	HBXCG52 R	1065	blastx.2	(AK001079) unnamed protein product [Homo sapiens]	dbj|BAA91496.1|	89% 46%	371 457	427 606
HCACS53	HCACS53R P00A	1067	blastx.2	histone H3 [Spisula solidissima]	gb|AAA29965.1|	90% 100% 86%	313 116 506	507 244 574
HCHAJ85	HCHAJ85R	1068	blastx.2	hemolysin [Acanthamoeba polyphaga]	gb|AAA58585.1|	61%	206	57
HCHMM71	HCHMM71 R	1069	blastx.2	(AC003040) unknown protein [Arabidopsis thaliana]	gb|AAC23757.1|	58% 44%	2 249	244 329
HCLBH21	HCLBH21R	1071	blastx.2	cytochrome c oxidase subunit 1 [Pan troglodytes]	dbj|BAA85270.1|	91% 88%	3 415	416 600
HCOMA72	HCOMA72 R	1073	blastx.2	NuMA protein - human	pir|S33413|S33413	100%	115	273
HCOMB04	HCOMB04 R	1074	blastx.2	prolylcarboxypeptidase [Homo sapiens]	gb|AAA99891.1|	98% 55%	77 702	718 782
HCOMD38	HCOMD38 R	1075	blastx.2	phospholipid hydroperoxide glutathione peroxidase [Homo sapiens]	emb|CAA50793.1|	100%	39	275
HCOMD61	HCOMD61	1076	blastx.2	(AF047470) malate	gb|AAC03787.1|	87%	1	216

	R			dehydrogenase precursor [Homo sapiens]		75%	240	287
HCOMF52	HCOMF52R	1078	blastx.2	hypothetical protein 384D8_6 [Homo sapiens]	gb|AAB03345.1|	80%	14	655
HCOMG28	HCOMG28R	1079	blastx.2	elongation factor 1 alpha [Oryctolagus cuniculus]	gb|AAA18502.1|	71% 100%	100 54	522 98
HCOMG40	HCOMG40R	1080	blastx.2	ribosomal protein L15 [Rattus norvegicus]	emb|CAA55026.1|	76%	35	646
HCOMI30	HCOMI30R	1083	blastx.2	ZZ:beta-Gal' IgG-binding fusion protein [unidentified cloning 1	gb|AAB00807.1|	85%	315	491
HCOMI37	HCOMI37R	1084	blastx.2	similar to 40S ribosomal protein; cDNA EST CEMSA13F comes from 1 1 gene; cDNA EST EMBL:M79582 comes from this gene; cDN	emb|CAA86061.1|	59% 66% 64%	304 89 518	540 301 568
HCOML11	HCOML11R	1085	blastx.2	fused-ccdB [Escherichia coli]	emb|CAA71575.1|	90%	273	470
HCOMM55	HCOMM55R	1087	blastx.2	The polymorphysm (RFLP) of this gene is associated with 1 1	dbj|BAA03853.1|	100%	298	176
HCOMO58	HCOMO58R	1088	blastx.2	(AF042857) lung cancer antigen NY-LU-12 variant A [Homo	gb|AAC05826.1|	98%	4	282

HCOMW52	HCOMW52 RP00B	1089	blastx.2	(AB032025) ubiquitin [Canis familiaris]	dbj|BAA83996.1|	99%	60	443
HCOMX77	HCOMX77 R	1090	blastx.2	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 1 (HNRNP CORE PROTEIN A1).	sp|P09651|ROA1_HUMAN	65% 96% 100% 57% 53% 48% 34% 57% 62% 44% 45% 75% 50%	133 5 81 5 8 5 142 11 81 5 11 81 84	315 82 122 82 76 82 291 82 128 82 79 116 119
HCONC18	HCONC18 RP00B	1091	blastx.2	cathepsin D [Homo sapiens]	gb|AAA51922.1|	87% 91% 83% 71%	3 190 335 426	188 333 424 467
HCONK56	HCONK56 R	1093	blastx.2	ribosomal protein L18 [Homo sapiens]	gb|AAA16329.1|	100% 57%	104 567	616 665
HCONL49	HCONL49 R	1095	blastx.2	ribosomal protein S13 [Homo sapiens]	dbj|BAA13528.1|	98%	3	221
HCONO17	HCONO17 R	1099	blastx.2	(AC004240) match to Z43555 (NID:g572788) [Homo sapiens]	gb|AAC04502.1|	81% 71%	4 65	69 148
HCONO25	HCONO25 R	1100	blastx.2	5,10-methenyltetrahydrofolate synthetase [Homo	gb|AAC41945.1|	77% 87% 100%	251 147 3	610 245 68

				sapiens]		51%	481	579
HCONP44	HCONP44R	1101	blastx.2	H+-transporting ATP synthase (EC 3.6.1.34) 58K chain - human	pir|A33281|A33281	96% 66%	3 391	398 426
HCONR31	HCONR31 R	1104	blastx.2	ezrin (AA 1-586) [Homo sapiens]	emb|CAA35893.1|	98%	3	281
HCONU03	HCONU03 R	1105	blastx.2	glyceraldehyde 3-phosphate dehydrogenase (EC 1.2.1.12) [Homo sapiens]	gb|AAA52496.1|	92% 92% 53%	3 511 611	518 627 688
HCONW62	HCONW62 R	1106	blastx.2	Human tetracycline transporter-like protein mRNA [Homo sapiens]	emb|CAA92577.1|	77% 85% 69% 36%	1 330 529 6	297 473 645 119
HCOOG32	HCOOG32 R	1111	blastx.2	ornithine decarboxylase antizyme [Homo sapiens]	dbj|BAA13497.1|	97%	5	334
HCOOG37	HCOOG37 R	1112	blastx.2	ribosomal protein S17 [Homo sapiens]	gb|AAA60284.1|	92%	78	482
HCOOI71	HCOOI71R	1114	blastx.2	calpactin I light chain [Bos taurus]	gb|AAA30423.1|	100%	64	354
HCOOI79	HCOOI79R	1115	blastx.2	beta-subunit [Bos taurus]	emb|CAA29094.1|	77% 50%	215 681	703 740
HCOOM18	HCOOM18 R	1116	blastx.2	keratin 18 [Homo sapiens]	gb|AAA59461.1|	95% 100%	14 616	640 690
HCOOM73	HCOOM73 R	1117	blastx.2	claudin-10 [Homo sapiens]	gb|AAC79506.1|	90%	26	694
HCOOQ46	HCOOQ46	1118	blastx.2	protein-tyrosine	emb|CAA48338.1|	100%	2	166

	R			phosphatase [Homo sapiens]				
HCOOT43	HCOOT43R	1120	blastx.2	neutral protease alpha subunit [Homo sapiens]	gb|AAA35646.1|	100%	95	439
HCOOT68	HCOOT68R	1121	blastx.2	(AF019661) zeta proteasome chain; PSMA5 [Mus musculus]	gb|AAC69149.1|	99% 77%	171 473	470 652
HCOOU56	HCOOU56R	1122	blastx.2	(AF143815) ribosomal protein [Bos taurus]	gb|AAD33912.1|AF143815_1	55% 62% 52%	30 233 698	515 406 748
HCOOW72	HCOOW72R	1123	blastx.2	keratin 18 [Homo sapiens]	gb|AAA59461.1|	78%	49	552
HCOOX48	HCOOX48R	1126	blastx.2	(AF095770) PTH-responsive osteosarcoma D1 protein [Homo sapiens]	gb|AAD25980.1|AF095770_1	87% 83%	218 330	310 365
HCOOY43	HCOOY43R	1127	blastx.2	THIOREDOXIN PEROXIDASE 1 (THIOREDOXIN-DEPENDENT PEROXIDE 1 (NATURAL KILLER CELL ENHANCING FACTOR B) (NKEF-B).	sp|P32119|TDX1_HUMAN	91%	22	426
HCOPB03	HCOPB03R	1129	blastx.2	ribosomal protein L19 - rat	pir|A56846|A56846	98% 62%	11 367	367 573

HCOPC45	HCOPC45R	1130	blastx.2	homologue of yeast IPP isomerase [Homo sapiens]	emb|CAA34890.1|	96%	3		89
HCOPD67	HCOPD67R	1131	blastx.2	ubiquitin conjugating-protein [Oryctolagus cuniculus]	gb|AAA31492.1|	91%	104		541
HCOPE27	HCOPE27R	1132	blastx.2	serine protease homolog=NES1 [human, mammary epithelial cells, 76N, Peptide, 276 aa] [Homo sapiens]	gb|AAB46780.1|	99%	2		400
HCOPI09	HCOPI09R A	1134	blastx.2	fused; toxic gene [synthetic construct]	emb|CAA67127.1|	77%	62		310
HCOPO34	HCOPO34R	1136	blastx.2	(AF026246) HERV-E envelope glycoprotein [Homo sapiens]	gb|AAC52076.1|	65%	122		337
HCOPO88	HCOPO88R	1138	blastx.2	'human homologue of rat ribosomal protein L9' [Homo sapiens]	dbj|BAA03401.1|	74%	4		507
HCOPV41	HCOPV41R	1139	blastx.2	MEMD protein [Homo sapiens]	emb|CAA71256.1|	97%	3		593
HCOPZ15	HCOPZ15R	1140	blastx.2	(AL031228) dJ1033B10.9 (Short-chain alcohol dehydrogenase family member (HKE6, RING2)) [Homo	emb|CAA20237.1|	96% 83%	7 572		579 625

				sapiens]				
HCOQA38	HCOQA38R	1141	blastx.2	hBD-1 [Homo sapiens]	emb|CAA63405.1|	100%	68	271
HCOQB12	HCOQB12R	1143	blastx.2	(AC005600) tuberin [Homo sapiens]	gb|AAC34210.1|	100% 84%	4 308	309 346
HCOQD29	HCOQD29R	1147	blastx.2	S3 ribosomal protein [human, colon, Peptide, 243 aa] [Homo sapiens]	gb|AAB19349.1|	93% 55% 60%	16 552 632	588 707 730
HCOQD38	HCOQD38R	1148	blastx.2	HMG1 protein (AA 1 - 215) [Bos taurus]	emb|CAA31284.1|	95%	112	636
HCOQD49	HCOQD49R	1149	blastx.2	H+-transporting ATP synthase (EC 3.6.1.34) gamma chain precursor - bovine	pir|A32019|PWBOG	89% 65%	35 513	532 692
HCOQG37	HCOQG37R	1151	blastx.2	1-8D [Homo sapiens]	emb|CAA40625.1|	99% 100%	51 386	386 409
HCOQH46	HCOQH46R	1153	blastx.2	mucin MUC5B [Homo sapiens]	gb|AAC51343.1|	100% 64%	95 324	343 365
HCOQJ06	HCOQJ06R	1156	blastx.2	37kD Laminin receptor precursor /p40 ribosomal associated protein [Gallus gallus]	emb|CAA64147.1|	85% 58%	26 352	361 474
HCOQJ07	HCOQJ07R	1157	blastx.2	laminin-binding protein [Homo sapiens]	gb|AAA36161.1|	88%	6	656
HCOQJ79	HCOQJ79R	1159	blastx.2	elongation factor 1 alpha [Oryctolagus cuniculus]	gb|AAA18502.1|	83%	1	471
HCOQK86	HCOQK86R	1160	blastx.2	(AF038129) polyubiquitin [Ovis	gb|AAB92373.1|	94% 94%	4 4	456 456

				aries]		93%	28	456
						97%	4	255
						56%	440	487
						30%	440	556
						30%	440	556
HCOQL87	HCOQL87R	1161	blastx.2	glutathione S-transferase-pi [Homo sapiens]	gb|AAA56823.1|	56%	24	521
						41%	328	630
HCOQM87	HCOQM87R	1162	blastx.2	DRPLA protein [Mus musculus]	dbj|BAA13450.1|	52%	3	278
						47%	17	307
HCOQO79	HCOQO79R	1163	blastx.2	TIMP [Homo sapiens]	emb|CAA00898.1|	99%	2	574
						61%	561	608
HCOQP32	HCOQP32R	1164	blastx.2	elongation factor 1-alpha [Homo sapiens]	gb|AAA52367.1|	95%	15	149
						64%	151	381
HCOQS11	HCOQS11R	1165	blastx.2	acidic ribosomal phosphoprotein (P2) [Homo sapiens]	gb|AAA36472.1|	78%	102	398
HCOQU92	HCOQU92R	1167	blastx.2	protein translocation complex beta subunit [Canis familiaris]	gb|AAA19639.1|	100%	91	270
						100%	272	301
HCOQV27	HCOQV27R	1168	blastx.2	B4-2 protein [Homo sapiens]	gb|AAA85576.1|	96%	3	239
HCOQX38	HCOQX38R	1169	blastx.2	catechol O-methyltransferase [Homo sapiens]	emb|CAA81263.1|	96%	32	421
						91%	421	489
						80%	495	539
						100%	1	30
HCOQY33	HCOQY33R	1170	blastx.2	(AB000910) ribosomal protein [Sus scrofa]	dbj|BAA19210.1|	96%	49	321
HCOQZ86	HCOQZ86	1173	blastx.2	MHC class II HLA-	gb|AAA59782.1|	92%	106	357

	R			DR-beta-1 [Homo sapiens]		77%	351	470
HCORB20	HCORB20R	1175	blastx.2	(AB012122) TIP49 [Homo sapiens]	dbj|BAA28169.1|	98%	68	292
HCORB66	HCORB66R	1177	blastx.2	ribosomal protein L28 [Homo sapiens]	gb|AAA85657.1|	94%	75	482
HCORI18	HCORI18R	1178	blastx.2	hnRNP B1 protein [Homo sapiens]	dbj|BAA06031.1|	100% 100% 56% 49% 50% 44% 43% 39%	120 2 126 123 129 120 132 2	317 124 305 305 305 317 317 124
HCORI25	HCORI25R	1179	blastx.2	pm5 protein [Homo sapiens]	emb|CAA40655.1|	98%	3	419
HCQCR82	HCQCR82R	1180	blastx.2	NADH dehydrogenase subunit 3 [Homo sapiens]	dbj|BAA77672.1|	91% 90%	3 247	245 276
HCRME42	HCRME42R	1181	blastx.2	IGF binding protein-2 [Sus scrofa]	gb|AAC48728.1|	87% 59% 47%	1 297 332	369 416 427
HDABR53	HDABR53R	1182	blastx.2	ribosomal protein L23a [Homo sapiens]	gb|AAA03341.1|	97%	38	463
HDTAQ74	HDTAQ74R	1185	blastx.2	(AF112208) 13kDa differentiation-associated protein [Homo sapiens]	gb|AAF17196.1|AF112208_1	61% 90% 53% 100%	115 38 326 273	408 136 409 293
HDTBP08	HDTBP08R	1186	blastx.2	UbcH5C [Homo sapiens]	gb|AAA91461.1|	97%	255	470

HDTDB88	HDTDB88R	1188	blastx.2	cytochrome c oxidase subunit 1 [Pan troglodytes]	dbj|BAA85270.1|	89% 88%	27 259	275 441
HE8QX44	HE8QX44R	1190	blastx.2	(AF010472) alpha-amidating monooxygenase [Homo sapiens]	gb|AAD01439.1|	93% 95% 80%	49 272 475	288 475 549
HE9QU94	HE9QU94R	1191	blastx.2	alligator Wilm's tumour protein [Alligator mississippiensis]	emb|CAA59735.1|	100%	3	170
HEAHF02	HEAHF02R	1192	blastx.2	(AC004044) predicted protein of unknown function [Arabidopsis thaliana]	gb|AAD15346.1|	37%	62	376
HEEAY40	HEEAY40R	1193	blastx.2	hypothetical protein 2 (rRNA external transcribed spacer) - 1	pir|S12206|S12206	100%	3	128
HEGAF68	HEGAF68R	1194	blastx.2	URF 3 (NADH dehydrogenase subunit) [Homo sapiens]	emb|CAA24033.1|	89% 89%	3 178	179 321
HFABK01	HFABK01R	1196	blastx.2	NADH dehydrogenase subunit 2 [Homo sapiens]	dbj|BAA07291.1|	80% 69%	2 186	190 284
HFIBG63	HFIBG63R	1198	blastx.2	cytokine SDF-1-beta [Homo sapiens]	gb|AAA97434.1|	96%	152	406
HFIJB15	HFIJB15R	1199	blastx.2	cytochrome oxidase subunit II [Homo sapiens]	gb|AAA20843.1|	93%	2	517
HFIXK57	HFIXK57R	1200	blastx.2	URF 3 (NADH dehydrogenase subunit)	emb|CAA24033.1|	90%	5	325

				[Homo sapiens]				
HFIZQ64	HFIZQ64R	1201	blastx.2	(AK001601) unnamed protein product [Homo sapiens]	dbj|BAA91782.1|	100%	48	137
HFKKK36	HFKKK36R	1202	blastx.2	neutral calponin [Homo sapiens]	dbj|BAA12090.1|	96%	3	86
HFPEC93	HFPEC93R	1203	blastx.2	URF 2 (NADH dehydrogenase subunit) [Homo sapiens]	emb|CAA24027.1|	87% 90%	66 1	527 66
HFPIX37	HFPIX37R	1204	blastx.2	(AL137696) hypothetical protein [Homo sapiens]	emb|CAB70878.1|	51% 41%	4 1	240 258
HFTDK36	HFTDK36R	1205	blastx.2	folate-binding protein precursor [Homo sapiens]	gb|AAA35822.1|	100% 38%	90 341	290 514
HFVIB28	HFVIB28R	1206	blastx.2	fused-ccdB [Escherichia coli]	emb|CAA71575.1|	70%	26	175
HFXGR60	HFXGR60R	1207	blastx.2	(AF034746) LNXp70 [Mus musculus]	gb|AAC40076.1|	56%	347	57
HHAUD07	HHAUD07R	1208	blastx.2	GTP-binding regulatory protein Gs alpha chain isoform - 1	pir|JH0813|JH0813	75%	337	459
HHBFO21	HHBFO21R	1209	blastx.2	URF 3 (NADH dehydrogenase subunit) [Homo sapiens]	emb|CAA24033.1|	83% 82% 64%	3 248 205	236 328 246
HHEVG50	HHEVG50R	1210	blastx.2	CAG-isl 7 [Homo sapiens]	gb|AAC16021.1|	93%	13	474
HHFGQ65	HHFGQ65RA	1211	blastx.2	(AJ249731) putative G8.1 protein [Homo	emb|CAB56506.1|	81% 77%	107 25	319 129

HHSFG15	HHSFG15R	1213	blastx.2	(AF014888) NADH dehydrogenase subunit 2 [Homo sapiens]	gb|AAC25447.1|	78%	3		743
HHSGP15	HHSGP15R	1214	blastx.2	cytochrome oxidase subunit III [Talpa europaea]	emb|CAB71165.1|	74% 62%	2 517		529 717
HHSGQ17	HHSGQ17R	1215	blastx.2	cytochrome b [Homo sapiens]	gb|AAA19775.1|	89%	79		435
HKBAD05	HKBAD05R	1216	blastx.2	(AB015335) HRIHFB2072 [Homo sapiens]	dbj|BAA88116.1|	84% 100%	61 324		351 356
HKZAE07	HKZAE07R	1218	blastx.2	Na+, K+-ATPase beta-subunit precursor [Sus scrofa]	gb|AAA31002.1|	100%	1		138
HKZAI14	HKZAI14R	1220	blastx.2	keratin 18 [Homo sapiens]	gb|AAA59461.1|	100%	3		368
HKZAI68	HKZAI68RA	1221	blastx.2	antigen [Homo sapiens]	gb|AAA02999.1|	100%	2		79
HKZAQ39	HKZAQ39R	1222	blastx.2	ubiquitin-conjugating enzyme UbcH7 [Homo sapiens]	emb|CAA63538.1|	100%	19		480
HKZAR58	HKZAR58R	1223	blastx.2	(AC005545) AP-3 complex delta subunit, partial CDS [Homo 1	gb|AAC34214.1|	98%	3		266
HKZAS59	HKZAS59R	1224	blastx.2	ATP synthase beta subunit precursor [Homo sapiens]	gb|AAA51809.1|	100%	1		462
HKZAS64	HKZAS64R	1225	blastx.2	nephropontin [Homo	gb|AAA17675.1|	98%	1		276

HKZAS84	HKZAS84R	1226	blastx.2	sapiens] calpain II regulatory subunit (EC 3.4.22.17) [Bos taurus]	gb|AAA30422.1|	100%	2	103
HKZAV69	HKZAV69R	1227	blastx.2	ribosomal protein S17 [Homo sapiens]	gb|AAA60284.1|	100%	8	412
HKZAV72	HKZAV72R	1228	blastx.2	fibronectin precursor [Homo sapiens]	emb|CAA26536.1|	100%	2	163
HKZBB22	HKZBB22R	1230	blastx.2	(AB015610) ribosomal protein S4X [Chlorocebus aethiops]	dbj|BAA36501.1|	100%	8	520
HKZBS89	HKZBS89R	1231	blastx.2	ferritin heavy subunit [Homo sapiens]	gb|AAA35830.1|	100%	1	381
HLDQQ80	HLDQQ80R	1232	blastx.2	ATPase subunit 6 [Papio hamadryas]	emb|CAA76999.1|	74% 54%	2 153	142 257
HLDXE19	HLDXE19R	1233	blastx.2	neuron-restrictive silencer factor [Homo sapiens]	gb|AAC50115.1|	80%	17	187
HLICD55	HLICD55R	1234	blastx.2	glutamine:fructose-6-phosphate amidotransferase [Homo sapiens]	gb|AAA58502.1|	96%	56	148
HLJBI37	HLJBI37R	1236	blastx.2	H(+)-transporting ATP synthase [Bos taurus]	emb|CAA45865.1|	100% 65% 80% 60% 88%	165 329 83 481 450	335 610 187 555 476
HLTHA47	HLTHA47R	1237	blastx.2	100 kDa protein [Rattus norvegicus]	emb|CAA45756.1|	82% 88%	187 380	393 406

HLTJA50	HLTJA50R	1238	blastx.2	(AK002071) unnamed protein product [Homo sapiens]	dbj|BAA92068.1|	63%	334	723
HLYDI57	HLYDI57R	1241	blastx.2	URF 1 (NADH dehydrogenase subunit) [Homo sapiens]	emb|CAA24026.1|	90%	2	565
HMCFO19	HMCFO19 R	1242	blastx.2	hypothetical 18K protein - goldfish mitochondrion	pir|JC1348|JC1348	46%	104	361
HMCIZ44	HMCIZ44R	1243	blastx.2	URF 2 (NADH dehydrogenase subunit) [Homo sapiens]	emb|CAA24027.1|	86% 74% 40%	1 377 207	342 517 389
HMCJE25	HMCJE25R	1244	blastx.2	cytochrome oxidase subunit I [Hylobates lar]	emb|CAA67630.1|	82% 77%	3 298	314 351
HMSPB25	HMSPB25R	1245	blastx.2	alcohol dehydrogenase [Homo sapiens]	gb|AAA51596.1|	75%	315	172
HMVBB04	HMVBB04 R	1246	blastx.2	cytochrome-c oxidase (EC 1.9.3.1) chain I - western lowland 1	pir|C59153|C59153	86%	73	201
HNAAE01	HNAAE01 R	1247	blastx.2	(AP000616) similar to RING-H2 finger protein RHA1a (AF078683) [Oryza sativa]	dbj|BAA85438.1|	67% 67% 100% 100% 100% 100% 100% 100%	95 96 90 89 92 91 93 94 91	196 197 155 154 157 156 158 159 153
HNBUY37	HNBUY37	1249	blastx.2	smooth muscle myosin	gb|AAB28951.1|	95%	77	289

	R			heavy chain isoform SM1 [human, umbilical 1				
HNBVL57	HNBVL57R	1250	blastx.2	growth-arrest-specific protein 2 [Homo sapiens]	gb|AAC52058.1|	74% 55%	242 70	514 384
HNHBC18	HNHBC18R	1251	blastx.2	OS9 [Homo sapiens]	gb|AAC39523.1|	100% 41% 46% 35%	1 245 315 244	243 403 404 435
HNJFE85	HNJFE85R	1252	blastx.2	(AL031670) dJ681N20.2 (similar to FTLL1(ferritin, light 1	emb|CAB43181.1|	97%	224	451
HNKCO29	HNKCO29R	1253	blastx.2	(AF044957) NADH:ubiquinone oxidoreductase B15 subunit [Homo sapiens]	gb|AAD05421.1|	95%	52	390
HNOAA22	HNOAA22R	1254	blastx.2	acidic ribosomal phosphoprotein (P1) [Homo sapiens]	gb|AAA36471.1|	91%	114	422
HNOAB88	HNOAB88R	1257	blastx.2	actin 2 protein [Strongylocentrotus purpuratus]	gb|AAA30032.1|	83% 81%	3 509	491 541
HNOAC15	HNOAC15R	1259	blastx.2	unnamed protein product [unidentified]	emb|CAB42187.1|	93%	1	87
HNOAE50	HNOAE50R	1260	blastx.2	ribosomal protein L21 [Homo sapiens]	emb|CAA61582.1|	98%	98	577
HNOAE65	HNOAE65R	1261	blastx.2	ribosomal protein L26 [Homo sapiens]	emb|CAA49189.1|	100%	101	535

HNOAF22	HNOAF22 R	1262	blastx.2	ribosomal protein L21 [Homo sapiens]	emb|CAA61582.1|	100%	76	555
HNOAG34	HNOAG34 R	1264	blastx.2	collagen alpha 1(I) chain - bovine (fragments)	pir|A91193|CGBO1S	64%	54	239
						72%	1	108
						75%	221	319
						37%	3	239
						67%	221	313
						39%	21	239
						44%	54	236
						36%	15	236
						37%	15	236
						44%	72	239
						39%	21	239
						42%	12	236
						38%	3	236
						38%	15	239
						45%	84	236
						48%	99	239
						35%	15	236
						41%	54	239
						35%	6	239
						36%	3	239
						62%	233	319
						42%	69	239
						47%	93	236
						36%	15	239
						38%	3	200
						45%	93	236
						35%	15	239
						38%	54	239

239	93	44%				
236	6	41%				
239	3	37%				
236	69	41%				
236	6	35%				
239	15	34%				
239	84	44%				
322	218	48%				
239	6	35%				
236	21	36%				
239	15	33%				
239	3	36%				
239	3	32%				
319	218	48%				
239	54	36%				
322	227	52%				
236	15	35%				
328	233	50%				
328	233	54%				
322	227	51%				
239	111	46%				
319	218	47%				
236	21	33%				
322	233	53%				
316	233	57%				
239	114	42%				
316	233	57%				
316	233	53%				
328	227	50%				
328	227	51%				

239	69	38%						
236	3	33%						
316	233	53%						
96	1	59%						
239	93	36%						
358	233	45%						
319	227	51%						
322	227	50%						
319	221	45%						
319	218	47%						
319	233	51%						
316	212	45%						
316	227	46%						
316	221	46%						
322	233	50%						
322	221	44%						
328	230	44%						
328	227	45%						
108	1	44%						
239	93	38%						
322	227	45%						
316	227	50%						
316	233	50%						
316	227	50%						
319	230	50%						
319	227	43%						
322	233	46%						
316	221	46%						
319	233	48%						
316	227	46%						

322	233	50%				
316	227	51%				
316	233	50%				
316	227	41%				
316	233	50%				
322	233	46%				
322	227	46%				
328	242	44%				
319	212	41%				
316	227	46%				
322	233	46%				
105	1	45%				
322	230	44%				
123	1	39%				
322	209	42%				
316	260	63%				
319	227	45%				
105	1	44%				
108	1	41%				
316	227	43%				
114	1	42%				
105	1	42%				
105	1	44%				
316	233	46%				
316	221	39%				
93	1	45%				
322	227	45%				
93	1	41%				
108	1	38%				
322	233	46%				

| | | |

108	1	35%				
108	1	36%				
108	1	33%				
316	227	38%				
316	227	43%				
316	221	40%				
108	1	38%				
362	321	64%				
105	1	34%				
108	1	41%				
108	1	41%				
93	1	35%				
123	1	31%				
322	212	40%				
66	1	50%				
105	1	36%				
93	1	41%				
93	1	35%				
105	1	37%				
105	1	37%				
108	1	36%				
328	221	37%				
105	1	34%				
316	212	36%				
316	233	39%				
93	1	38%				
105	1	40%				
93	1	38%				
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93	1	41%				
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108	1	33%				
114	1	31%				
105	1	37%				
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322	233	40%				
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105	1	34%				
316	230	37%				
316	227	40%				
93	1	38%				
108	1	33%				
96	1	37%				
316	218	39%				
123	1	31%				
316	233	38%				
105	1	36%				
108	1	38%				
316	233	39%				
322	233	40%				
93	1	38%				
108	1	36%				
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322	233	36%				
93	1	32%				
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108	1	30%				
93	1	35%				

108	1	33%				
108	1	30%				
316	218	38%				
316	227	35%				
108	1	38%				
105	1	31%				
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319	233	34%				
322	233	36%				
322	221	39%				
316	233	35%				
66	1	36%				
316	233	35%				
319	233	34%				
71	238	38%				
20	250	34%				
226	357	45%				
86	238	38%				
214	357	44%				
223	321	48%				
77	235	39%				
223	318	50%				
226	318	48%				
50	238	37%				
71	238	35%				
71	199	39%				
86	238	47%				
226	321	46%				
214	318	47%				
214	318	45%				

37%	238	86				
30%	238	80				
45%	318	220				
42%	360	226				
48%	318	226				
31%	238	71				
51%	318	214				
26%	253	68				
50%	199	104				
38%	238	98				
46%	315	226				
46%	315	226				
44%	357	226				
38%	238	104				
37%	238	92				
45%	318	226				
40%	357	226				
43%	318	223				
39%	238	71				
44%	318	214				
39%	354	226				
46%	318	223				
44%	357	223				
41%	238	104				
35%	238	71				
38%	238	71				
34%	238	77				
45%	318	217				
44%	315	214				
43%	321	214				

44%	321	223				
39%	238	98				
35%	238	71				
47%	318	214				
42%	321	214				
33%	238	71				
36%	238	71				
50%	315	226				
40%	318	223				
44%	321	226				
35%	238	71				
33%	238	71				
35%	238	71				
34%	235	71				
35%	238	68				
35%	244	92				
38%	238	92				
33%	238	71				
35%	238	98				
35%	238	98				
35%	238	71				
45%	318	226				
47%	318	226				
47%	318	226				
45%	318	226				
43%	321	226				
42%	318	217				
36%	330	223				
44%	321	223				
44%	321	217				

89	235	34%				
217	318	43%				
217	318	40%				
220	318	41%				
214	330	35%				
71	238	41%				
3	65	47%				
226	330	40%				
226	318	41%				
223	318	37%				
214	318	37%				
226	318	44%				
226	321	39%				
226	318	38%				
226	321	43%				
226	321	40%				
226	312	41%				
226	315	40%				
223	315	39%				
214	321	44%				
271	318	56%				
226	321	50%				
220	321	40%				
223	321	38%				
226	357	34%				
226	315	40%				
226	318	38%				
226	318	38%				
271	318	52%				
226	318	35%				

						38%	56	3
						33%	65	3
HNOAH67	HNOAH67R	1266	blastx.2	elongation factor 1 alpha [Oryctolagus cuniculus]	gb|AAA18502.1|	87%	2	358
HNOAJ67	HNOAJ67R	1267	blastx.2	(AB000911) ribosomal protein [Sus scrofa]	dbj|BAA19211.1|	100%	69	524
HNOAL51	HNOAL51R	1270	blastx.2	(AD001528) spermidine aminopropyltransferase [Homo sapiens]	gb|AAB61308.1|	72%	70	255
						75%	3	74
HNOAO71	HNOAO71R	1273	blastx.2	MAP kinase kinase [Homo sapiens]	gb|AAA36318.1|	98%	62	283
HNOAP21	HNOAP21R	1274	blastx.2	Q1Z 7F5 [Homo sapiens]	gb|AAA36021.1|	91%	20	667
HNOAQ24	HNOAQ24R	1275	blastx.2	epoxide hydrolase [Homo sapiens]	gb|AAA52390.1|	89%	2	571
HNOAQ47	HNOAQ47R	1276	blastx.2	TAXREB107 [Homo sapiens]	dbj|BAA04491.1|	99%	1	618
HNOAR85	HNOAR85R	1278	blastx.2	(AF161378) HSPC260 [Homo sapiens]	gb|AAF28938.1|AF161378_1	88%	287	562
						92%	99	290
HNOAS07	HNOAS07R	1279	blastx.2	scar protein [Homo sapiens]	gb|AAA36597.1|	97%	96	521
						97%	1	108
HNOAS36	HNOAS36R	1280	blastx.2	proteoglycan core protein [Homo sapiens]	gb|AAB00774.1|	100%	3	254
HNOAS92	HNOAS92R	1281	blastx.2	glutathione transferase M1 [Homo sapiens]	gb|AAA59203.1|	100%	2	385
HNOAT76	HNOAT76R	1283	blastx.2	(AB016193) transcription factor	dbj|BAA36616.1|	100%	2	187

				[Homo sapiens]				
HNOAV91	HNOAV91 R	1284	blastx.2	ribosomal protein L28 [Homo sapiens]	gb|AAA85657.1|	99%	29	439
HNOBE83	HNOBE83 R	1286	blastx.2	translation initiation factor eIF3 p40 subunit [Homo sapiens]	gb|AAD03465.1|	100% 60% 79%	2 525 694	598 692 765
HNOBV55	HNOBV55 RA	1287	blastx.2	ribosomal protein L12 [Homo sapiens]	gb|AAA36157.1|	100% 74%	171 65	506 217
HNOCE63	HNOCE63 R	1288	blastx.2	(AF083217) WD repeat protein WDR3 [Homo sapiens]	gb|AAD45865.1|AF083217_1	68% 30% 45%	2 442 393	388 819 557
HNOCL43	HNOCL43 R	1289	blastx.2	alpha-1 type III collagen [Homo sapiens]	gb|AAA52002.1|	98%	2	193
HNOCN02	HNOCN02 R	1290	blastx.2	TARBP-b gene product [Homo sapiens]	gb|AAA91344.1|	91%	7	666
HNOCN10	HNOCN10 R	1291	blastx.2	(AF043254) heat shock protein 75 [Homo sapiens]	gb|AAC02679.1|	90% 40% 100%	4 488 435	423 622 464
HNOCR44	HNOCR44 R	1292	blastx.2	ribosomal protein L7a large subunit [Homo sapiens]	gb|AAA60282.1|	80%	3	440
HNOCU03	HNOCU03 R	1293	blastx.2	translational elongation factor-1 alpha [Danio rerio]	emb|CAA54771.1|	74%	40	360
HNODG11	HNODG11 R	1295	blastx.2	tumor protein (AA 1 - 172) [Homo sapiens]	emb|CAA34200.1|	71% 70% 66% 85%	93 262 482 552	362 498 580 611

HNOJA93	HNOJA93R	1298	blastx.2	general transcription factor [Homo sapiens]	emb|CAA37375.1|	100%	1	453
HNOJB10	HNOJB10R	1299	blastx.2	(AF110731) antioxidant enzyme B166 [Homo sapiens]	gb|AAF03750.1|AF110731_1	98% 53% 54%	11 384 418	376 521 480
HNOJB57	HNOJB57R	1300	blastx.2	midkine [Homo sapiens]	dbj|BAA01457.1|	74%	92	520
HNOJH48	HNOJH48R	1304	blastx.2	(AF077054) unr protein [Homo sapiens]	gb|AAD27787.1|AF077054_1	100%	2	283
HNOJH52	HNOJH52R	1305	blastx.2	S-adenosylhomocysteine hydrolase [Homo sapiens]	gb|AAA51681.1|	100%	6	179
HNOJI82	HNOJI82R	1306	blastx.2	ubiquitin [synthetic construct]	gb|AAA57047.1|	94%	22	489
HNOJI85	HNOJI85R	1307	blastx.2	(AF035718) mesoderm-specific basic-helix-loop-helix protein; Pod-1 [Homo sapiens]	gb|AAC62514.1|	86%	13	513
HNOJJ20	HNOJJ20R	1308	blastx.2	ribosomal protein L23a [Homo sapiens]	gb|AAA03341.1|	98%	1	261
HNOJJ26	HNOJJ26R	1309	blastx.2	plasma gelsolin [Homo sapiens]	emb|CAA28000.1|	73%	2	568
HNOJK66	HNOJK66R	1310	blastx.2	von Willebrand factor prepropeptide [Homo sapiens]	gb|AAB59512.1|	90% 100% 26% 25% 25% 26%	1 408 16 13 307 91	459 491 396 324 402 405

						69%	218	256
						27%	319	399
						38%	343	402
						32%	16	171
HNOJM64	HNOJM64R	1312	blastx.2	alpha-tubulin III [Cricetulus griseus]	gb|AAA37026.1|	97%	3	428
HNOJO55	HNOJO55R	1313	blastx.2	Protein sequence and annotation available soon via Swiss-Prot; 1 [Homo sapiens]	emb|CAA62188.1|	93%	423	277
						100%	134	9
						66%	134	9
						53%	423	277
						40%	423	268
						48%	131	9
						36%	143	3
						37%	423	289
						39%	402	286
						44%	116	9
						30%	423	280
						33%	128	12
						28%	128	12
						23%	128	3
						30%	128	12
						42%	408	310
						32%	423	289
						35%	426	265
						27%	137	3
						37%	396	280
						30%	408	280
						22%	146	12
						35%	119	9
						41%	357	280

						28%	414	280		
						34%	116	12		
						37%	381	280		
						25%	423	280		
						23%	426	310		
						27%	116	9		
						35%	402	286		
						35%	426	298		
						28%	423	277		
						28%	116	12		
						39%	158	93		
						31%	420	310		
						35%	140	99		
						25%	128	12		
						43%	117	70		
HNOJP42	HNOJP42R	1314	blastx.2	envelope protein [Homo sapiens]	gb|AAA88027.1|	71%	6	302		
HNOJQ22	HNOJQ22R	1315	blastx.2	(AJ224875) glucosyltransferase [Homo sapiens]	emb|CAA12176.1|	100%	217	510		
						100%	1	219		
HNOKA20	HNOKA20R	1316	blastx.2	signal recognition particle subunit 14 [Homo sapiens]	emb|CAA51838.1|	97%	38	259		
HNOKG34	HNOKG34R	1318	blastx.2	hnRNPcore protein A1 [Homo sapiens]	emb|CAA56072.1|	100%	43	510		
						31%	52	324		
HNOKI89	HNOKI89R	1323	blastx.2	(AF009368) Luman [Homo sapiens]	gb|AAB69652.1|	100%	2	370		
HNOKT24	HNOKT24R	1326	blastx.2	ribosomal protein L6 [Homo sapiens]	emb|CAA49188.1|	89%	74	457		
						68%	3	191		
HNOKU52	HNOKU52	1327	blastx.2	ribosomal protein L29	gb|AAC50499.1|	98%	33	509		